

CATALOGUE

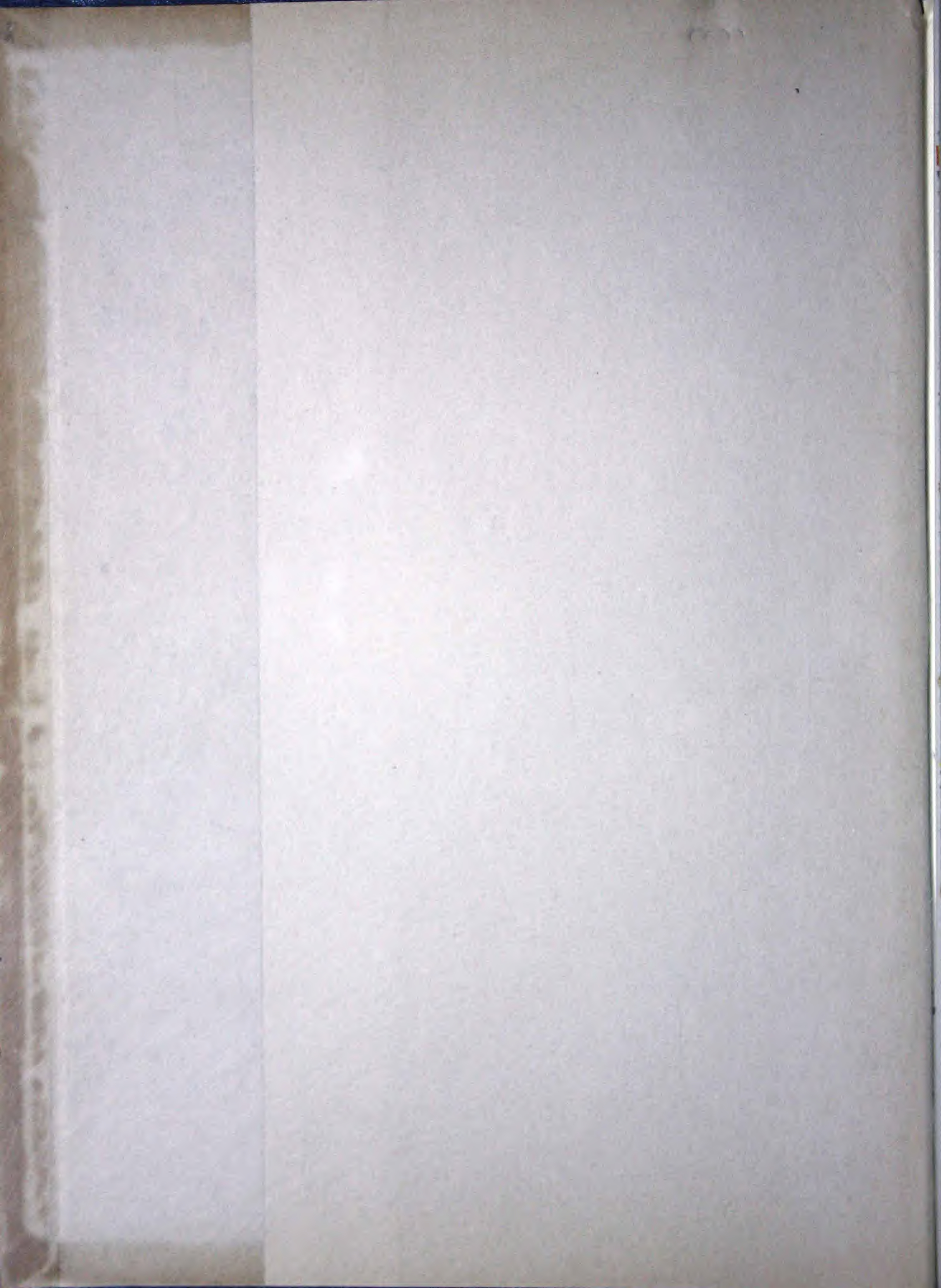


THE STEEL COMPANY OF CANADA LIMITED

EXECUTIVE OFFICES

HAMILTON

MONTREAL





General Catalogue

1931

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Executive Offices

HAMILTON

MONTREAL

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Works

HAMILTON, ONT.
BRANTFORD, ONT.

MONTREAL, QUE.
LACHINE, QUE.
LONDON, ONT.

TORONTO, ONT.
GANANOQUE, ONT.

Sales Offices

HAMILTON, ONT.	-	-	-	-	-	-	-	WILCOX AVE.
MONTREAL, QUE.	-	-	-	-	-	-	-	525 DOMINION STREET
TORONTO, ONT.	-	-	-	-	-	-	-	BANK OF HAMILTON BLDG.
WINNIPEG, MAN.	-	-	-	-	-	-	-	504 MAIN STREET
VANCOUVER, B.C.	-	-	-	-	-	-	-	907 CREDIT FONCIER BLDG.
ST. JOHN, N.B. (H. G. ROGERS, LIMITED)-	-	-	-	-	-	-	-	147 PRINCE WILLIAM ST.
HALIFAX, N.S.	-	-	-	-	-	-	-	607 DENNIS BUILDING
WINDSOR, ONT.	-	-	-	-	-	-	-	1167 VICTORIA AVE.

Cable Addresses

MONTREAL — "MONSTELCO"

HAMILTON — "STELCO"

Codes

PRIVATE CODES
A.B.C. 5TH EDITION
LIEBER'S

WESTERN UNION
BENTLEY'S
WORLD UNIVERSAL



MONTREAL PLANTS



MONTREAL OFFICE



NOTRE DAME WORKS



ST. HENRY WORKS



ST. PATRICK WORKS



DOMINION WORKS LACHINE



HAMILTON OFFICE



HAMILTON PLANTS

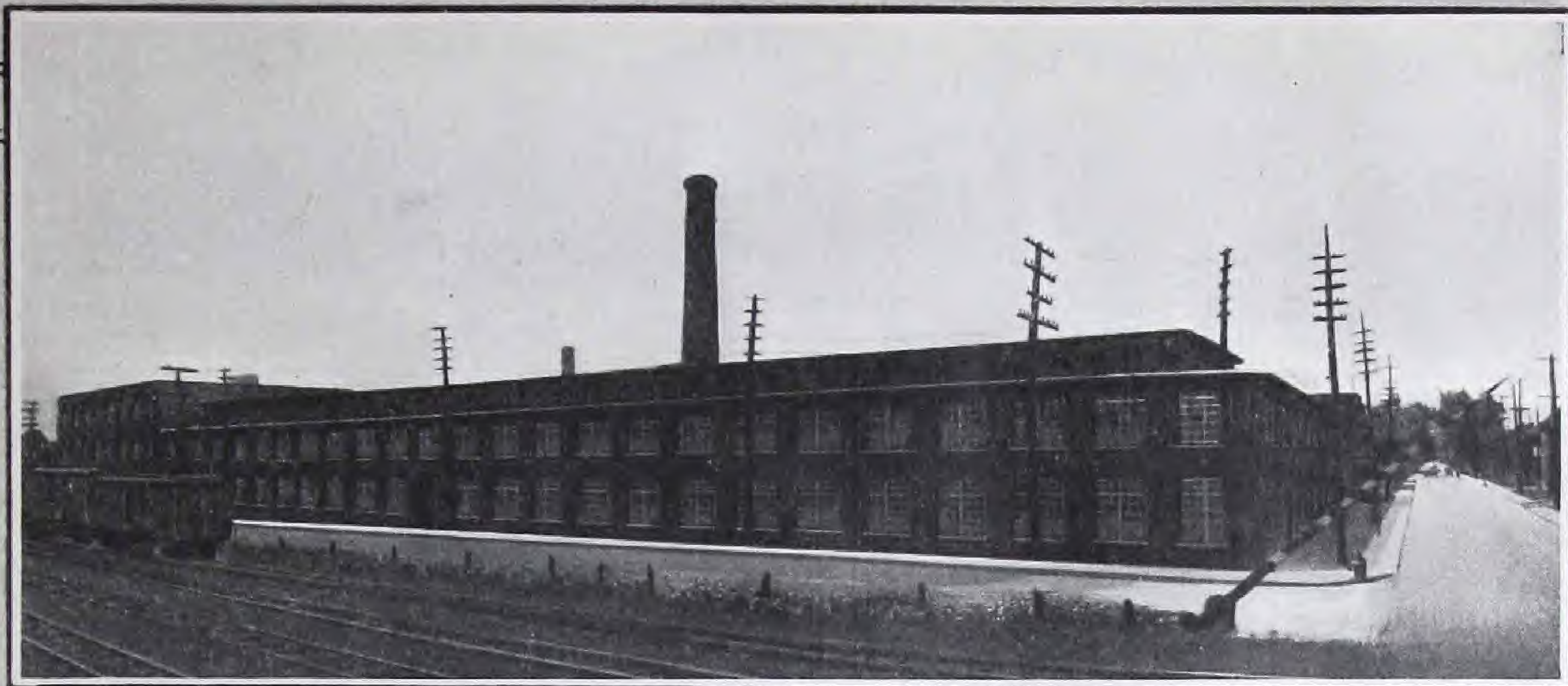


HAMILTON WORKS

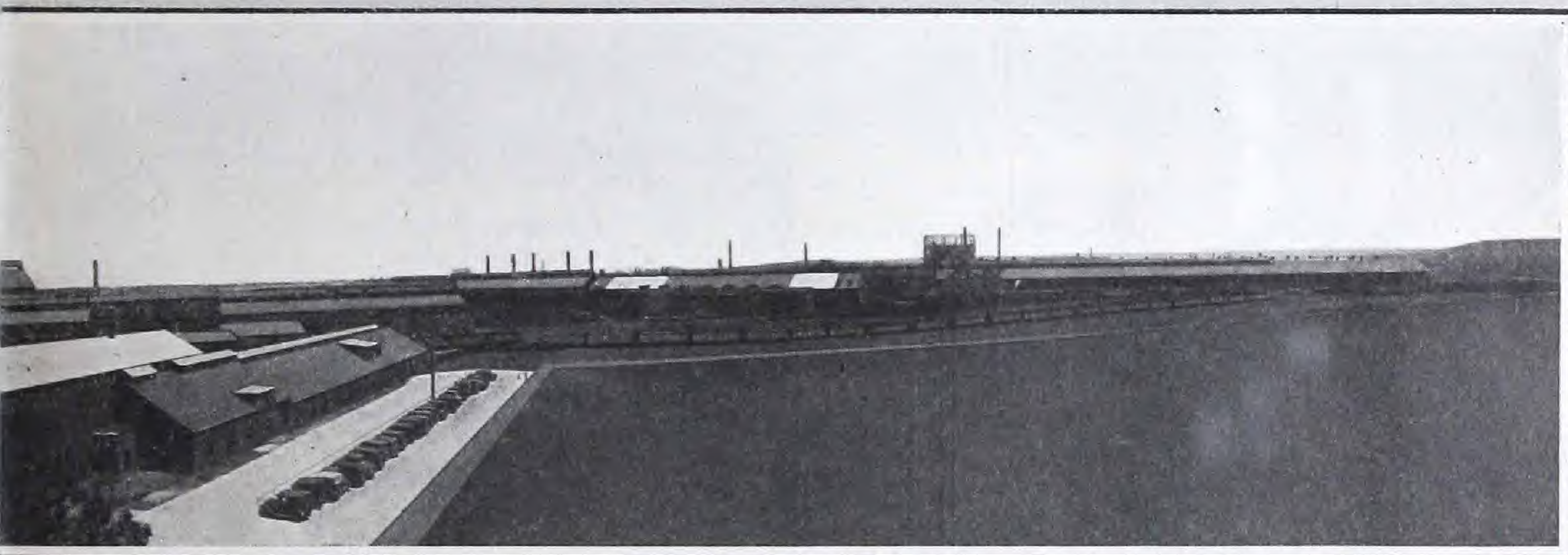


CANADA WORKS, WEST PLANT

THE STEEL COMPANY OF CANADA LIMITED



CANADA WORKS, EAST PLANT

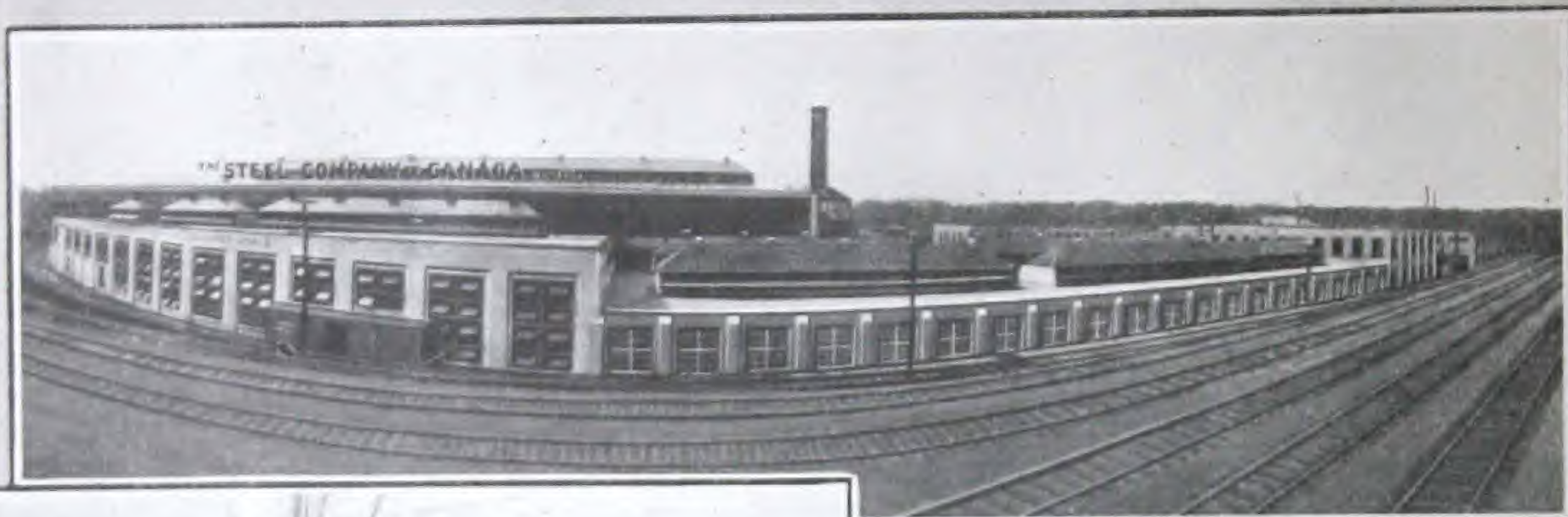


ONTARIO WORKS

THE STEEL COMPANY OF CANADA LIMITED



BRANTFORD WORKS



SWANSEA WORKS,
TORONTO



WESTERN WIRE & NAIL
WORKS, LONDON



LOWER GANANOQUE WORKS



UPPER GANANOQUE WORKS

Foreword

TO our friends in the Hardware Trade and to all users of Iron or Steel, we present this new and revised edition of our General Catalogue.

It has been our aim to give in convenient form the fullest information possible about our wide range of products, but space has restricted us to our standard lines. In addition we make many specialties not described in this Catalogue. With our extensive equipment we are able to undertake the manufacture of new forms or special sizes, and enquiries will always receive careful consideration.

Compared with previous issues, the last one published in 1920, the present Catalogue introduces a number of changes designed to promote its usefulness and convenience. Its size has been increased, and conforms to the standard adopted by the National Association of Purchasing Agents. The larger type used throughout is easier to read. The order of the contents follows the successive stages in the manufacture of steel, from basic materials to finished lines. Many of the tables have been revised, and the information in general is shown in greater detail. New lines, undertaken since our last Catalogue was issued, have been included.

We gratefully acknowledge the co-operation of our customers who have made suggestions which have been useful in preparing this Catalogue.

THE
STEEL COMPANY OF CANADA
LIMITED

HAMILTON

MONTREAL



PRODUCTS

COKE

FURNACE

FOUNDRY

DOMESTIC

BY-PRODUCTS

XYLOL
COAL TAR

SULPHATE OF AMMONIA
TOLUOL
STELINE

SOLVENT NAPHTHA
BENZOL

PIG IRON

BASIC

MALLEABLE

FOUNDRY

BILLETS, BARS, SECTIONS

INGOTS
BARS

BLOOMS
WIRE RODS
PLOW BEAMS

BILLETS
ANGLES
CONCRETE REINFORCING BARS

SLABS

AGRICULTURAL SHAPES

SHEETS

BLUE ANNEALED

BLACK
COPPER BEARING GALVANIZED

COPPER BEARING

GALVANIZED

TRACK FASTENINGS

ANGLE BARS TRACK BOLTS TIE PLATES SPIKES TIE RODS "S" TIE STEELS

DROP FORGINGS

AUTOMOBILE

CARRIAGE HARDWARE

SPECIAL LIGHT FORGINGS

BOLTS AND NUTS

MACHINE
TIRE AND SLEIGH SHOE

CARRIAGE

ELEVATOR

PLOW
BLANK AND TAPPED NUTS

STOVE

WASHERS

ROUND AND SQUARE WROUGHT

SPIKES AND RIVETS

RAILWAY SPIKES PRESSED AND DRIFT SPIKES STEEL AND COPPER RIVETS AND BURRS
BOILER, STRUCTURAL AND TANK RIVETS

POLE LINE HARDWARE

POLE STEPS

CROSS ARM BRACES

GUY CLAMPS

GUY RODS

BLACK AND GALVANIZED

CARRIAGE HARDWARE

IRON AND STEEL PIPE

SCALE FREE, BLACK AND GALVANIZED

COUPLINGS, NIPPLES AND HANGERS

HORSE SHOES, TOE AND HEEL CALKS

WIRE AND WIRE PRODUCTS

STEEL, BRASS, COPPER AND BRONZE—HEAVY AND FINE
BRIGHT, ANNEALED, COPPERED, LIQUOR BRIGHT, GALVANIZED AND TINNED
STRANDED STEEL AND COPPER CABLE CLOTHES LINE SPRING AND BARBED WIRE
FARM AND CHAIN LINK FENCING CONCRETE MESH AND FENCE GATES WIRE HOOPS
SCREWED BRIGHT GOODS GAS AND ELECTRIC WELDING RODS

NAILS, STAPLES AND TACKS

WIRE, CUT, BOAT AND HORSE SHOE NAILS
TACKS AND SHOE NAILS STEEL, BRASS AND COPPER STAPLES

SCREWS

WOOD AND MACHINE, STEEL, BRASS AND BRONZE,

COACH AND LAG

LEAD PRODUCTS

WHITE LEAD, PUTTY, LEAD PIPE, SHOT

SPECIAL FINISHES

BRASS PLATING
COPPER PLATING
ELECTRO GALVANIZING
BLUEING

BRONZE PLATING
CHROMIUM PLATING
NICKEL PLATING
HOT GALVANIZING

CADMIUM PLATING
SILVER PLATING
TINNING
JAPANNING

Registered

TRADE MARKS

USED BY

THE STEEL COMPANY OF CANADA LIMITED

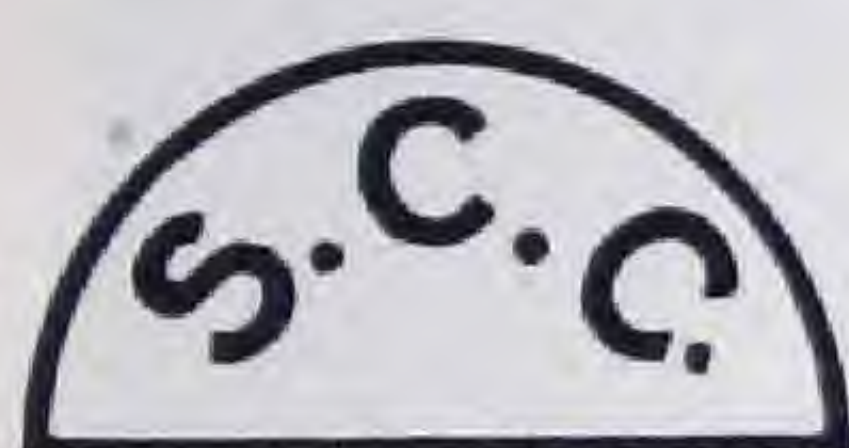
General Trade Mark



Trade Marks Used for Special Lines

"ELECTROD"

Electric Arc Welding Rods



Putty

"MOLDOCHIL"

Nails



Horse Shoes

"GASROD"

Oxyacetylene Welding Rods



*Horse Shoes
Horse Nails*



Sulphate of Ammonia



Wood Screws



*Wood Screws
Clothes Line Wire*

Invincible

*Fencing and
Gates*



**Champion
Horse Nails**



*White Lead
Easyweld Toe and Heel Calks*

"Shinglerite"

Nails



"BAY STATE"

Tire Bolts

GENERAL CONDITIONS OF SALE

All quotations and sales are made, and all orders accepted by the Steel Company of Canada, Limited, subject to the following conditions:

1. The seller accepts no responsibility for the arrival of goods at destination, nor for loss or damage in transit, except in the case of goods sold delivered. The purchaser assumes all risks of transportation, except such as are covered by the legal responsibilities of the carriers. The tender to the purchaser of shipping documents consisting of proper bills of lading certifying that the goods are in apparent good order, constitutes a full and final delivery on the part of the seller and entitles him to payment in full for the goods shipped, in accordance with the terms of sale.

2. The seller accepts no responsibility for delays due to fires, strikes, disputes with workmen, war, civil commotion, epidemics, floods, interruptions or congestion of transportation, accidents or other causes beyond his control; and delays so caused shall not release the purchaser from his obligation to take delivery and pay for the goods in accordance with the terms of sale. Provided, however, that in the event of such unavoidable delay the purchaser may, subject to previously obtaining the consent of the seller, cancel the purchase of such portion of the goods not manufactured, nor in process of manufacture at the time his request to cancel reaches the works.

3. The seller gives the purchaser the privilege of cancelling any one month's delivery if such delivery is delayed more than thirty days beyond the expiration of the month in question, provided the purchaser notifies the seller within ten days after the expiration of the said thirty days, of their desire to cancel. If not cancelled within that time, it is understood that shipment will be made as soon as reasonably possible after the cause of delay has been removed. All specifications are to be in the possession of the seller at least fifteen days before the time fixed for shipment.

4. In the event of the purchaser failing to furnish complete specifications and instructions in time to permit of shipment within the time specified in the contract, the seller shall be entitled, at his option, to cancel such portion of the contract as may remain unexecuted, or to make shipment in accordance with the specifications and instructions which the purchaser may have furnished for previous shipments on account of the same contract.

5. Material or goods made to specification where the buyer is to inspect must be inspected and accepted before shipment is made. Inspection and acceptance at the seller's works shall be final. Facilities will be afforded to authorized inspectors, representing the purchaser, to inspect material and to apply, previous to shipment from the works, tests to which the seller has previously agreed. Material or goods supplied under inspection and passed by the inspector shall not be returnable afterwards.

Defective goods and material will be replaced, but claims for damage, freight, labor, etc., will not be allowed.

6. Claims will be considered by the seller only when made within ten days after receipt of the goods, and due opportunity has been given for investigation by the seller's own representatives. No claims for consequential damages will be recognized.

7. No goods will be insured unless instructions are given us to that effect by the purchaser.

8. All quotations are made for immediate acceptance, unless otherwise agreed upon, and are subject to change without notice.

The majority of the prices shown in this catalogue are list prices and are subject to a discount which will be quoted on application. The base prices, the extras for which are shown, will also be quoted on application. All list prices and extras are subject to change without notice.

The weights given in this catalogue are approximately correct, and are not guaranteed.

In the case of bars of steel or iron or other goods ordered by count but sold by weight, the seller will guarantee the weight but not the count.

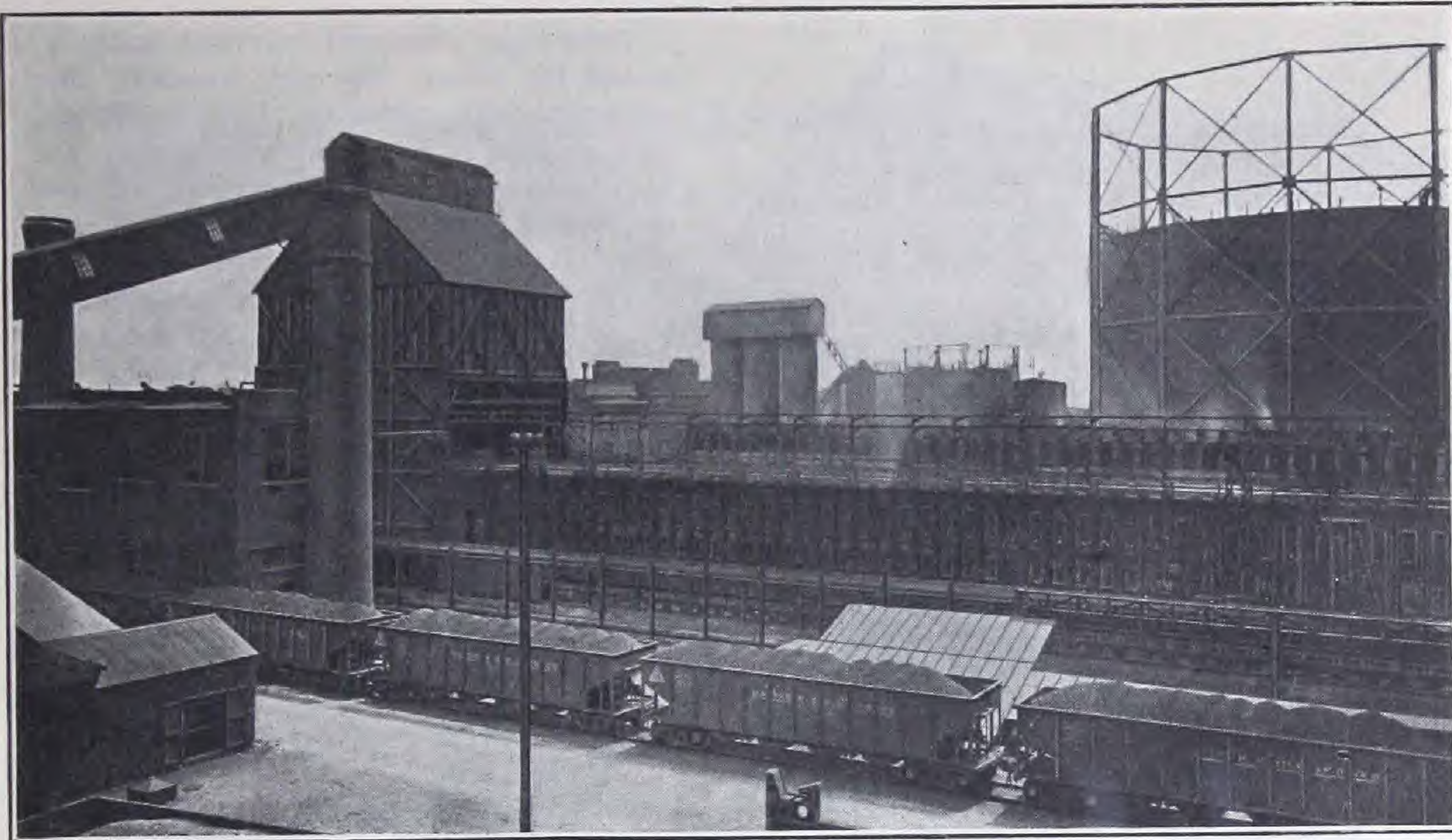
9. All goods are sold F.O.B. seller's mills unless otherwise agreed upon. Where a freight allowance is quoted it is understood that it will not apply to quantities less than three hundred pounds.

10. The seller's accounts are rendered promptly and should be settled for by cash in accordance with the terms agreed upon. When goods are sold with a freight allowance, cash discount is allowed only on the net amount of the invoice after the freight is deducted.

The seller reserves the right to draw at sight for all accounts overdue, with exchange, without notice.

Default in payment for any delivery will entitle the seller to cancel the contract. If after entering into a contract the purchaser fails to execute any of his obligations thereunder, the seller has the right to terminate the contract, without prejudice to any claim for damages they may make. The seller reserves the right, even after partial shipment on account of a contract, to require from the purchaser satisfactory security for the due performance of his obligations, and failure to furnish such satisfactory security will entitle the seller, at his option, to suspend shipments or to cancel the contract or so much of it as may remain unexecuted.

11. All contracts are subject to the approval of the General Sales Department of The Steel Company of Canada, Limited.



View of Coke and By-Products Plants

COKE AND BY-PRODUCTS

This plant consists of eighty by-product coke ovens with the necessary equipment for the recovery of gas, tar, ammonium sulphate and benzols as by-products. The consumption of coal runs into many thousands of tons annually, the supply being secured from mines owned by this Company.

About 75% of the coke produced is consumed in the adjoining Blast Furnaces of the Company in the production of pig iron. The balance, after crushing, screening and treatment to make it dustless, is sold for domestic fuel. The entire output of gas is used for fuel in connection with the production and rolling of steel in other departments of the plant. A portion of the tar is also used as fuel and the balance sold to chemical works for further distillation and manufacture into the large variety of products of which tar is the raw material. The entire output of ammonium sulphate is sold for fertilizing, and the benzol products for motor fuel and a variety of other chemical products.

METALLURGICAL COKE

Foundry Size Coke can be supplied suitable for metallurgical purposes other than for the melting of iron in cupolas.

Blast Furnace Coke used extensively by us for the reduction of iron ore, is also very satisfactory for salamanders.



COKE AND BY-PRODUCTS—Cont'd

HOUSEHOLD BY-PRODUCT

"QUICK-FIRE" COKE



"The fuel of the future."

Stelco Coke, compared with Anthracite coal pound for pound, has more available heat units and costs much less. It is a quick-fire and free burning coke, from which the gas has been extracted. This allows for the complete checking or shutting off of the chimney pipe, thereby keeping the heat in the furnace instead of allowing it to be wasted by going up the chimney. When more heat is wanted the bottom draft can be opened, keeping the chimney checked as much as possible.

Stelco Coke is an ideal household fuel and is dustless, gasless, smokeless and sootless, these properties having been eliminated in the coking process. It is properly screened and sized to meet the demands for various types and kinds

of heating plants and is a very easy and convenient fuel to burn, as it ignites rapidly, responding instantly to draft.

Stelco Coke is available in the following sizes:—

Egg, approximating in size Egg anthracite. Most commonly used in the heating plants of Residences, Apartment Houses, Factories and Bakeries.

Stove, a size approximating that of Stove anthracite and ideally adapted for most domestic heating equipment.

Nut, used extensively in ranges, cook stoves, laundry stoves, and open fireplaces.

Pea, a large Pea Coke, admirably adapted for Spencer Heaters, small cooking ranges and furnace banking.

Breeze, used extensively in heating plants equipped with Blowers.



"GROMORE"

SULPHATE OF AMMONIA

Our modern By-Product Coke Plant is producing a superior quality of Sulphate of Ammonia.

Commercial Sulphate of Ammonia is white or grayish in color. It is a valuable plant food and an important chemical containing over 25% Ammonia and more than 20½% Nitrogen. It is therefore the richest of commercial nitrogenous materials.

The analysis of our product is highly recommended owing to its freedom from acid and low moisture content.

Sulphate of Ammonia can be used alone, but more often reaches the farmer in the form of mixed fertilizers. There are several reasons for this. In the first place, the manufacturer appreciates the economy of the high nitrogen test, as it saves money in freight and handling. The high test also enables him to utilize lower grade nitrogenous materials that are useful as conditioners, and at the same time maintain his regular formula.

Sulphate of Ammonia mixes well with all other fertilizer ingredients commonly in use, such as Acid Phosphate, the Potash Salts, Cotton Seed Meal, Tankage and Fish-scrap, on account of not being subject to loss by chemical action when so mixed.

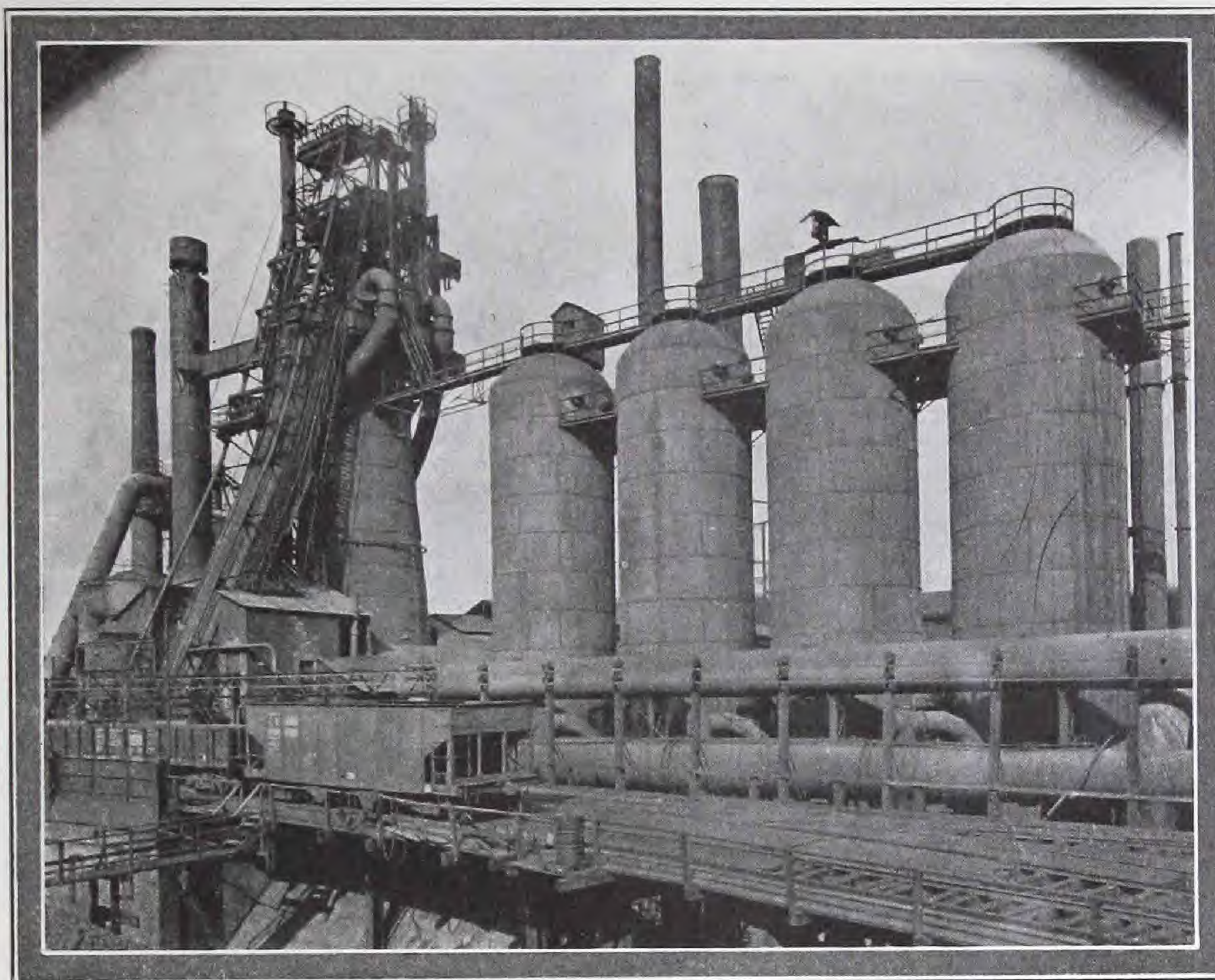
Shipped in Bulk or in Bags



OTHER BY-PRODUCTS

There are numerous other by-products which are obtained when coke is manufactured, such as coal tar, steline, pure benzol, 90% benzol, motor benzol, dipped goods benzol, xylol, toluol, solvent naphtha.

Further particulars will be given on application



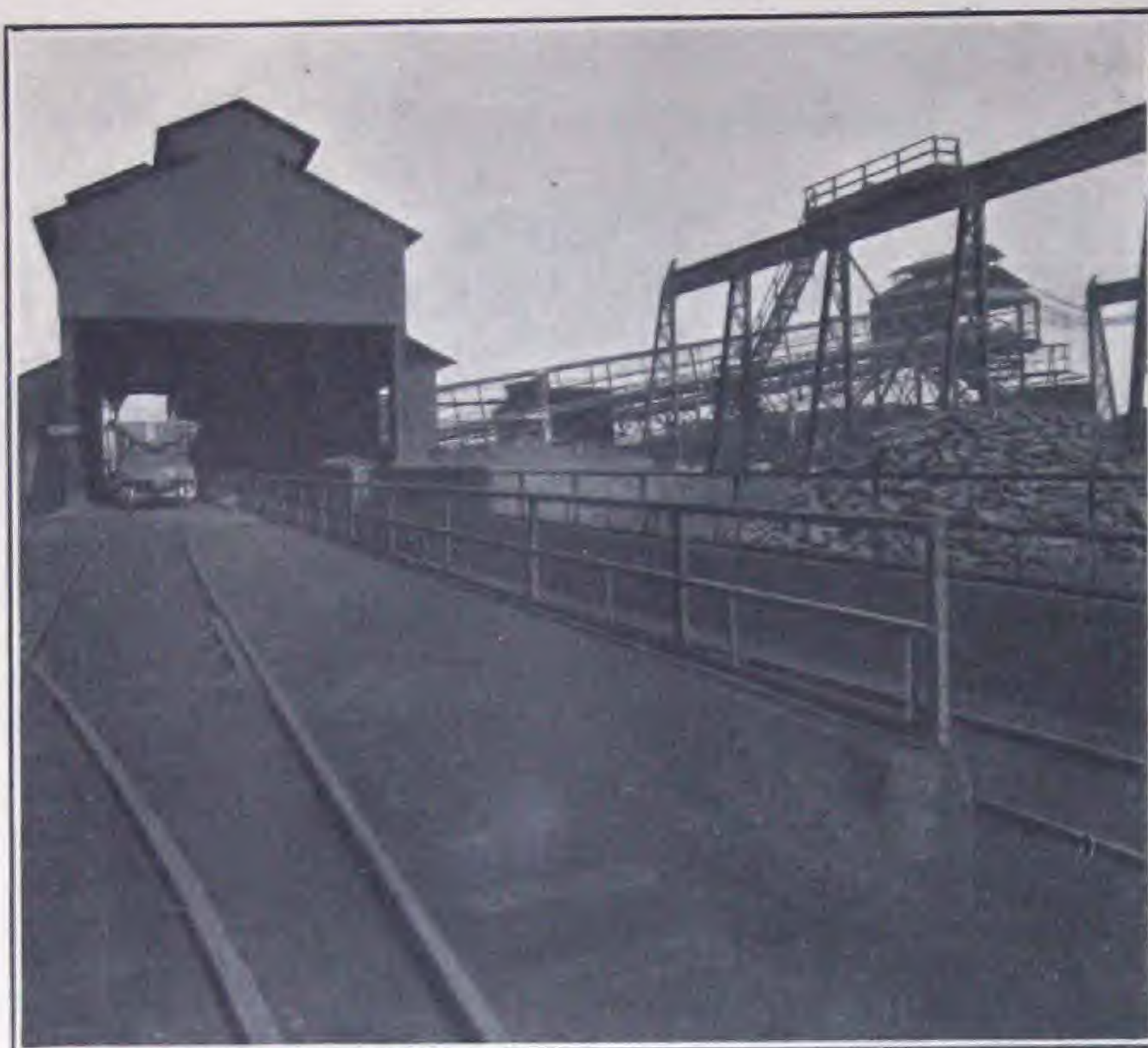
One of the Blast Furnaces at Hamilton Works.

PIG IRON

The Blast Furnaces of the Company are located adjacent to the coke oven plant already described. They are completely equipped with modern auxiliary facilities in order that their operation may be scientifically controlled and directed at all times. Large tonnages of raw materials—coke, iron ore and limestone—are consumed annually.

In addition to the burden, approximately four tons of air are required for the production of a ton of pig iron. The air is compressed in large blowing engines, from which it passes to the hot blast stoves, where the temperature is raised to approximately 1,400 deg. Fahr., and then blown into the furnaces to support the combustion of carbon for the reduction of the ores.

The pig iron is used for the production of steel in the Company's Open Hearth Furnaces and is also sold in the various grades required for foundry purposes. The Foundry Iron is machine cast over a pig machine, where every precaution is taken to insure the production of clean pigs of uniform size.



Pig Casting Machine



MACHINE CAST PIG IRON

"Stelco" Pig Iron has established an enviable reputation with all Foundrymen. In its production particular care is exercised in the selection of the highest grades of Lake Superior ores, which are combined with the best quality By-Product Coke, a product of our own Ovens.

"Stelco" brand Iron is particularly well balanced and uniform in Phosphorus and Manganese, the resultant effect of which is to reduce shrinkage, increase the strength and to improve generally the quality of the castings. We invariably find that when a customer once uses "Stelco" Iron,

the results are so satisfactory, that he determines to continue its use.

"Stelco" Iron is sold exclusively on an analysis basis, regardless of fracture. An advice card, showing the analysis of each Car, is mailed the consignee upon date of shipment.

Our furnaces produce the following grades of iron:—

No. 1 FOUNDRY

No. 2 FOUNDRY

MALLEABLE BESSEMER

Other grades varying from the above can be supplied as and when produced by the furnaces

No. 1 FOUNDRY

Silicon.....	2.25 to 2.75%
Sulphur.....	.04% and under
Phosphorus.....	.55 to .80%
Manganese.....	.55 to .80%

This is a fluid Iron and is especially adapted for agricultural implements, machinery, radiation and all classes of work requiring toughness, softness and density

No. 2 FOUNDRY

Silicon.....	1.75 to 2.25%
Sulphur.....	.05% and under
Phosphorus.....	.55 to .80%
Manganese.....	.55 to .80%

This is a very strong Iron and is especially adapted for general foundry castings. The shrinkage is light and the Iron possesses the strength necessary for heavy work as well as for general castings and will mix, with good results, with other brands containing higher Silicon.

MALLEABLE BESSEMER

Silicon.....	1.00 to 2.00%
Sulphur.....	.05% and under
Phosphorus.....	.20% and under
Manganese.....	.50 to .80%

Adapted for general Malleable Castings.

For roughly estimating the weight of Pig Iron figure each pig as approximately 80 pounds



The Open Hearth Furnaces at Hamilton Works.

BILLETS, BARS AND SECTIONS

Direct control of operations, from the raw material to the finished product, is an important factor in maintaining high quality.

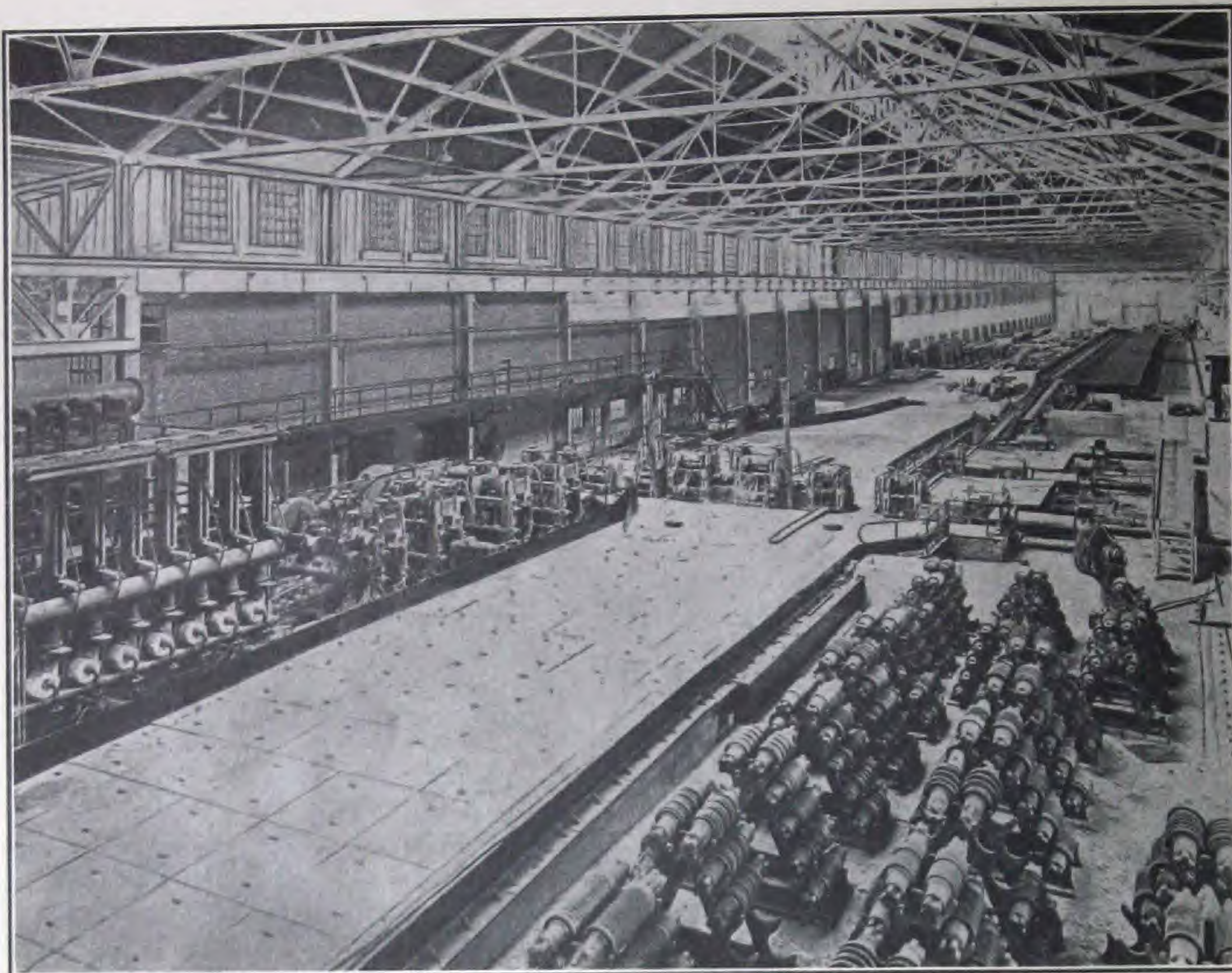
As pointed out in the introduction to the coke and by-products section of this catalogue, the coke used by us is produced in our own ovens from coal obtained from our own mines. This coke in turn is used for the smelting of iron ores, a large percentage of which is obtained from this Company's mines. Pig iron, produced by this smelting operation, forms a large portion of the raw material used for the production of steel.

The Open Hearth plant is located at our Hamilton Works where the steel is produced by the Basic Open Hearth process. The department consists of Open Hearth furnaces (see illustration above) together with the necessary auxiliaries, including charging machines, pouring cranes, auxiliary cranes, hot metal mixer, etc.

The furnaces are of the most modern type and embody in their design many advances in construction.

Two of these furnaces have drawn the attention of steel manufacturers from every part of this continent. Their outstanding feature is the fact that they are the first furnaces on the North American continent designed and built to use a mixture of Blast Furnace and Coke Oven gas as fuel. The ability to use this mixture has many advantages, the chief of which is a favorable effect on the quality of the steel produced. These furnaces are also equipped with meters, recording gauges and automatic regulating devices to keep the process of steel making under absolute control.

Basic Open Hearth Steel is produced to meet all standard specifications as well as steel for special purposes.



The 10"-12" Bar Rolling Mill at Hamilton Works

BILLETS, BARS AND SECTIONS—*Cont'd*

The Steel Company of Canada Limited operates bar rolling mills at Hamilton and Montreal. The raw product for these mills consists entirely of New Open Hearth Steel Billets from our own furnaces.

As an example of the effort made by this Company to meet economically the requirements of Canadian Industry, the following description of the Rolling Mill illustrated above should prove interesting to Canadian Buyers.

This mill was specially designed to suit the requirements of the Canadian trade. It is served by a heating furnace of the continuous type which uses Coke Oven and Blast Furnace Gas as fuel. This furnace is equipped with automatic recording and regulating devices to insure proper control of the heating operation. The mill consists of ten stands of rolls, driven by electric motors. In this mill the billets are reduced to bars which pass to a large, modern cooling bed, designed to control the cooling process so that the metallurgical requirements of the material may be rigidly maintained. Ample space and equipment are also provided for shearing, straightening, inspection and the various supplementary operations which are performed preparatory to shipment to the customer.

BILLETS, BARS AND SECTIONS—Cont'd

SPECIAL STEELS

To meet the individual user's requirements

Special carbon steels to meet the steel user's individual needs are a part of modern manufacturing development. Their real value lies in their ability to fill exactly the individual user's requirements. To provide this service the steel manufacturer must appreciate and sympathize with the user's aims and difficulties.

With a thorough appreciation of these problems The Steel Company of Canada, Limited, offers the services of its entire organization to assist the Canadian steel user in developing a steel most suitable to his individual needs. Our metallurgists, chemists and engineers constitute a group of authorities on steel production who are ready to co-operate with you as they have with many others.

Virtually everything, in which steel is used, can be better served by some distinctive feature in the quality of the steel. Our own experience has taught us so in manufacturing steels for our diversified range of products as covered by this catalogue. We are ready at all times to investigate your problems and assist you in the development of special steels for your products.

Forging Quality blooms, billets and bars are produced to Canadian Engineering Standards Association and other recognized standards, for axles, shafts, automobile parts and other purposes. They are clean and free from surface defects, assured by care in chipping and close inspection—they are uniform in quality because production at every stage is under our direct control and supervision.

Stelco Manganese Screw Stock, or Threading Steel, combines free cutting qualities practically equivalent to Bessemer Screw Stock. It is suitable for automatic machine operation because of consistent uniformity, assuring longer tool life and more continuous operation; case hardens quickly, giving a free grained case and a tough, ductile core approximating alloy grades.

It is recommended for forgings which require machining and for cold heading.

This same Stelco quality is available in higher carbon ranges when machinability and higher tensile properties are required.

Spring Steels—both Carbon and Silico-Manganese for automobile, railway, agricultural and industrial purposes.

These special steels are the result of investigation by our Metallurgical and Open-Hearth Departments, and respond uniformly and readily to standard heat treatments in producing maximum ability and service in the finished product.

Special Stelco Steel in billets, bars and other rollings for the individual steel user's exact requirements have been supplied as follows:—

Ford Types	Rail Anchor	Spring Steel—Pennsylvania	Chain Iron—Open Hearth
Forging Quality	Welding—Electric	" English	Chain Steel—Fireweld
Axe	" Fireweld	" " Agricultural	" " Electric Weld
Axe Poll	Case Hardening	" " S.A.E. Specifications	Cutlery
Axle	Copper Bearing	Special S.A.E. types	Plow Beam
Bolt	High Manganese	Stays—Boiler, Combustion	Rivet
Bumper	High Silicon	Cold Drawing	Shovel Bar

Automatic Screw Stock, case hardened.

They serve to add strength, machinability, threading quality, forging quality or reduction in weight as each particular case warrants.



BILLETS, BARS, SECTIONS—Cont'd

Standard Schedule of Extras for Hot Galvanizing Bars and Small Shapes

BASE SIZES

Regular base sizes of the Dominion Schedule of Extras as follows:—

Rounds and Squares.....	$\frac{3}{4}$ to 3 inches
Flats.....	1 to 6 inches x $\frac{3}{8}$ to 1 inch

Base extra quoted on application

ADDITIONAL EXTRAS FOR SIZE OVER BASE EXTRA

Small Rounds and Squares

Size, Inch	$\frac{5}{8}$	$\frac{9}{16}$	$\frac{1}{2}$	$\frac{7}{16}$	$\frac{3}{8}$	$\frac{5}{16}$	$\frac{1}{4}$	$\frac{3}{16}$
Per 100 lbs.	\$0.05	0.05	0.15	0.15	0.30	0.40	0.55	0.75

SMALL FLATS

1 to 6 inch x $\frac{1}{4}$ and $\frac{5}{16}$ inch.....	Per 100 lbs.	\$0.70
$\frac{7}{8}$ inch x $\frac{1}{4}$ to $\frac{3}{4}$ inch.....	" "	.85
$\frac{3}{4}$ inch x $\frac{1}{4}$ to $\frac{5}{8}$ inch.....	" "	.95
$\frac{5}{8}$ inch x $\frac{1}{4}$ to $\frac{1}{2}$ inch.....	" "	1.15
$\frac{1}{2}$ inch x $\frac{1}{4}$ to $\frac{7}{16}$ inch.....	" "	1.35

Small quantities and short lengths subject to special price on application.

OVALS

$\frac{7}{8}$ to $1\frac{1}{4}$ inches.....	Per 100 lbs.	\$0.80
$\frac{3}{4}$ inch.....	" "	.90
$\frac{5}{8}$ inch.....	" "	1.35
$\frac{1}{2}$ inch.....	" "	1.80

HALF OVALS AND HALF ROUNDS

$\frac{7}{8}$ to 2 inches.....	Per 100 lbs.	\$0.90
$\frac{3}{4}$ inch.....	" "	1.35
$\frac{5}{8}$ inch.....	" "	1.80
$\frac{1}{2}$ inch.....	" "	2.25
$\frac{3}{8}$ inch.....	" "	2.50

BAND STEEL, B.G. No. 10 AND BARS $\frac{3}{16}$ " THICK

Sizes, inches	$1\frac{1}{4}$ " & wider	$1\frac{1}{8}$	1	$\frac{7}{8}$	$\frac{3}{4}$	$\frac{5}{8}$	$\frac{1}{2}$
Per 100 lbs.	\$0.80	1.00	1.00	1.10	1.25	1.50	2.00

ANGLES AND TEES

We are able to galvanize Angles, Tees and other large sections and heavy articles. Prices quoted on application.

STANDARD PRACTICE FOR BUNDLING BARS

Bundles (of 50 or 100 pounds) of Steel:—The bars are cut to lengths as tabulated below, the weight being made up with the addition of one, or two short pieces. Loose Bars are in lengths of 15 to 17 feet.

Any length of Bar can be rolled; but orders for longer lengths than the length of a car should comprise two carloads, otherwise the freight will be excessive, as two flat cars are required for long lengths.

SIZES OF STEEL BARS BUNDLED

With the Approximate Number of Bars in 100 Pounds

ROUNDS AND SQUARES

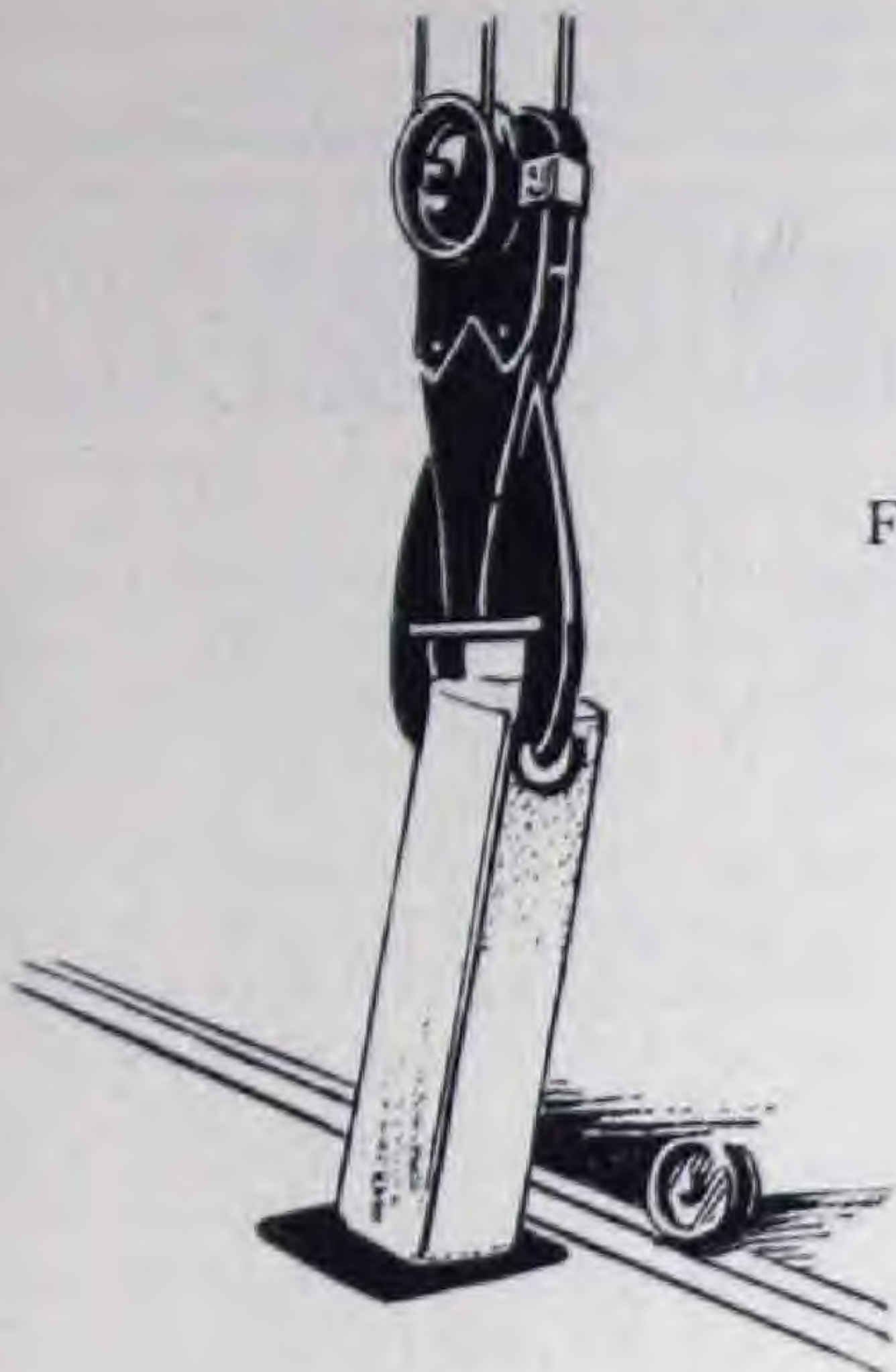
OVALS, HALF OVALS AND HALF ROUNDS

Size, Inch	Length of Bar	Rounds	Squares	Size, Inch	Length of Bar	Ovals	Half Ovals	Half Rounds
$\frac{3}{16}$	12' 0"	90	70	$\frac{3}{8}$	12' 0"	49	86	45
$\frac{1}{4}$	12' 0"	50	39	$\frac{7}{16}$	12' 0"	35	76	33
$\frac{5}{16}$	12' 0"	32	25	$\frac{1}{2}$	12' 0"	28	50	25
$\frac{3}{8}$	12' 0"	22	17	$\frac{5}{8}$	12' 0"	18	32	16
$\frac{7}{16}$	12' 0"	16	13	$\frac{3}{4}$	12' 0"	12	22	11
$\frac{1}{2}$	12' 0"	12	10	$\frac{7}{8}$	12' 0"	9	16	8
$\frac{9}{16}$	12' 0"	10	8	1	12' 0"	7	12	6
$\frac{5}{8}$	12' 0"	8	6	$1\frac{1}{8}$	12' 0"	5	10	
				$1\frac{1}{4}$	12' 0"	4	8	

FLATS

Width	Length of Bar	Thickness, Inch					
		$\frac{3}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$
$\frac{1}{2}$	12' 0"	26	20	16	13	11	..
$\frac{5}{8}$	12' 0"	21	16	12	10	9	8
$\frac{3}{4}$	12' 0"	17	13	10	9	7	6
$\frac{7}{8}$	12' 0"	15	11	9	7	6	6
1	16' 0"	10	7	6			
$1\frac{1}{8}$	16' 0"	9	7	5			
$1\frac{1}{4}$	16' 0"	8	6				

BILLETS, BARS, SECTIONS—*Cont'd*



Ingots

INGOTS
BLOOMS

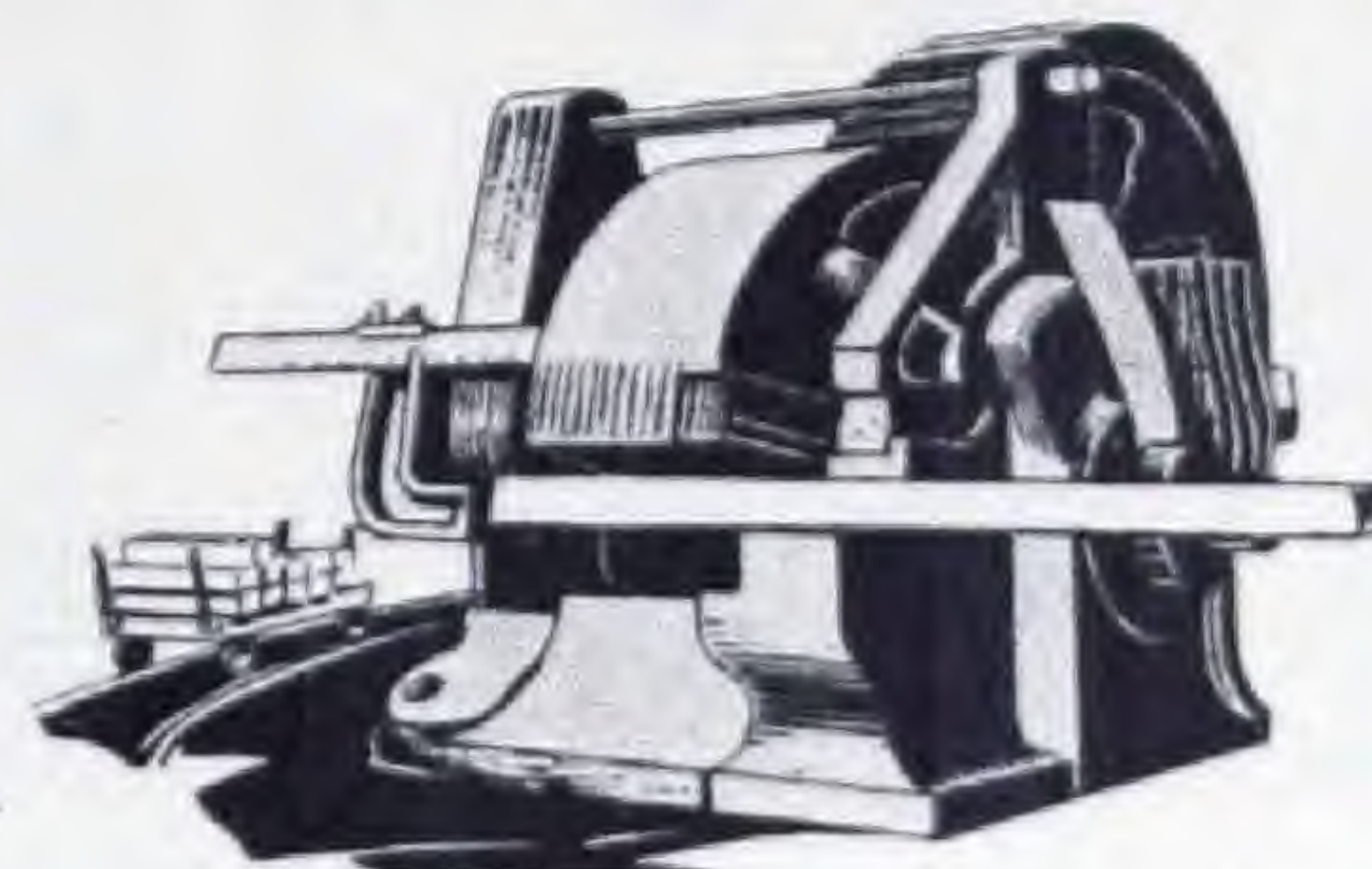
BILLETS
SLABS

FOR RE-ROLLING AND FORGING PURPOSES

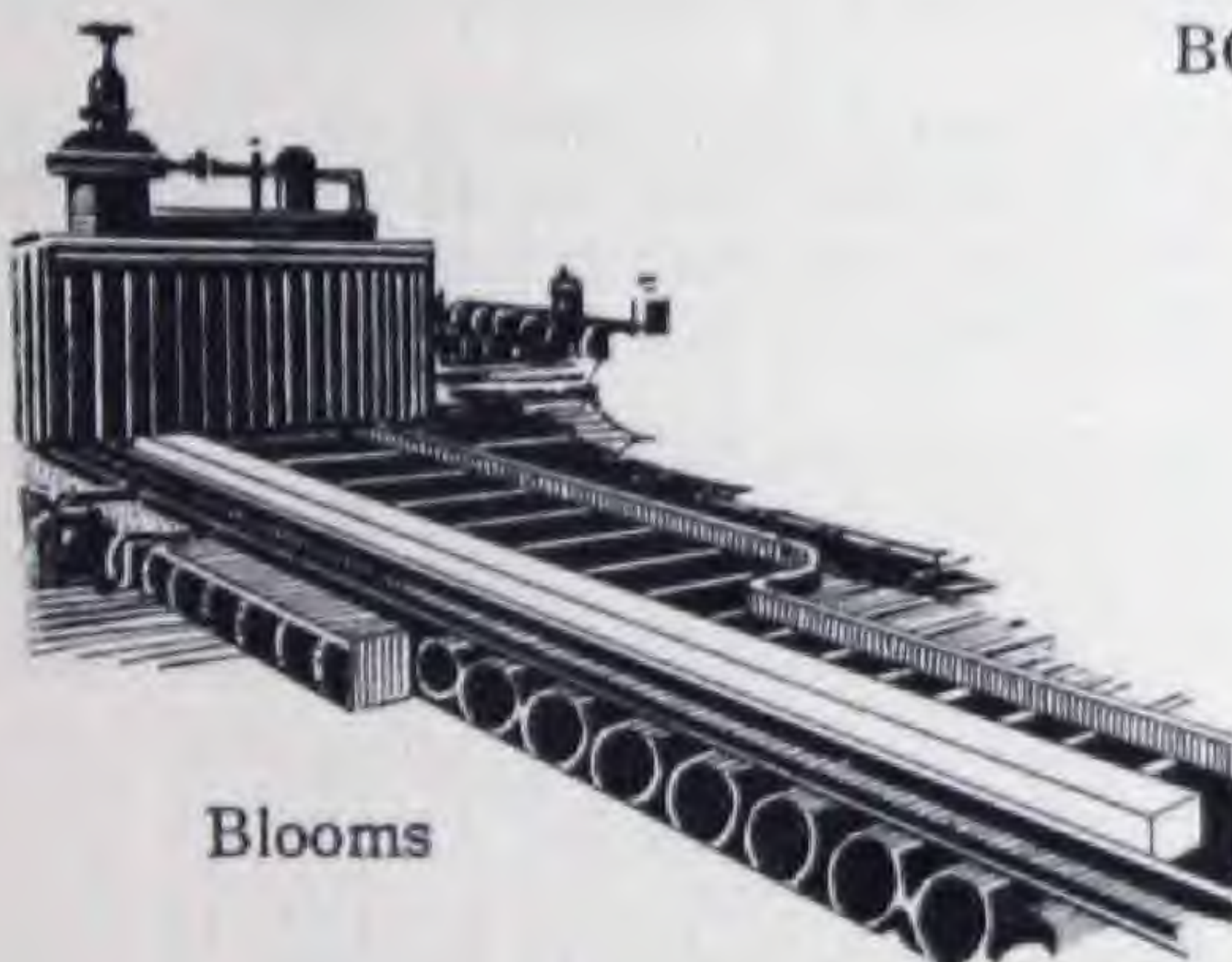
ARE PRODUCED AT OUR
HAMILTON WORKS

BY THE

BASIC OPEN HEARTH PROCESS
IN SIZES WITHIN OUR ROLLING
CAPACITY AND QUALITIES TO
MEET THE DIFFERENT RE-
QUIREMENTS OF THE MARKET,
BOTH AS TO STANDARD AND
SPECIAL SPECIFICATIONS.



Billets



Blooms

*Kindly submit
enquiries.*



Slabs

BARS

Sizes Rolled

ROUNDS



SQUARES



$\frac{3}{16}$ " to $1\frac{1}{2}$ " inclusive, advancing by $\frac{1}{64}$ ths.
 $1\frac{17}{32}$ " to 2" " " $\frac{1}{32}$ nds.
 $2\frac{1}{16}$ " to $3\frac{1}{2}$ " " " $\frac{1}{16}$ ths.
 $3\frac{5}{8}$ " to $5\frac{1}{2}$ " " " $\frac{1}{8}$ ths.

$\frac{1}{4}$ " to 2" inclusive, advancing by $\frac{1}{16}$ ths.
 $2\frac{1}{8}$ " to 4" " " $\frac{1}{8}$ ths.

Intermediate sizes will be considered if ordered in sufficient tonnage.



SQUARE AND ROUND STEEL BARS

WEIGHTS AND AREAS

Based on one cubic foot of steel weighing 489.6 pounds

SIZE INS.	WEIGHT LBS. PER FOOT		WEIGHT LBS. PER 16 FT. LENGTH		AREA SQUARE INCHES		SIZE INS.	WEIGHT LBS. PER FOOT		WEIGHT LBS. PER 16 FT. LENGTH		AREA SQUARE INCHES	
0							3						
1/16	.013	.010	.2126	.16704	.0039	.0031	1/16	30.60	24.03	489.92	384.80	9.000	7.069
1/8	.053	.042	.8507	.66816	.0156	.0123	1/8	31.89	25.05	510.56	400.96	9.379	7.366
3/16	.120	.094	1.92	1.50	.0352	.0276	3/16	33.20	26.08	531.68	417.60	9.766	7.670
1/4	.213	.167	3.41	2.67	.0625	.0491	1/4	34.54	27.13	553.12	434.40	10.160	7.980
5/16	.332	.261	5.31	4.18	.0977	.0767	5/16	35.91	28.21	575.04	451.68	10.563	8.296
3/8	.478	.376	7.65	6.00	.1406	.1105	3/8	37.31	29.30	597.28	469.12	10.973	8.618
7/16	.651	.511	10.41	8.18	.1914	.1503	7/16	38.73	30.42	620.00	486.88	11.391	8.946
1/2	.850	.668	13.62	10.69	.2500	.1963	1/2	40.18	31.55	643.00	505.12	11.816	9.281
9/16	1.076	.845	17.22	13.52	.3164	.2485	9/16	41.65	32.71	666.88	523.84	12.250	9.621
5/8	1.328	1.043	21.26	16.70	.3906	.3068	5/8	43.15	33.89	690.92	542.56	12.691	9.968
11/16	1.607	1.262	25.73	20.21	.4727	.3712	11/16	44.68	35.09	715.36	561.92	13.141	10.321
3/4	1.913	1.502	30.62	24.05	.5625	.4418	3/4	46.23	36.31	740.16	581.28	13.598	10.680
13/16	2.245	1.763	35.94	28.22	.6602	.5185	13/16	47.81	37.55	765.44	601.12	14.063	11.045
7/8	2.603	2.044	41.68	32.74	.7656	.6013	7/8	49.42	38.81	791.20	621.44	14.535	11.416
15/16	2.988	2.347	47.84	37.57	.8789	.6903	15/16	51.05	40.10	817.44	642.08	15.016	11.793
1	3.400	2.670	54.43	42.75	1.0000	.7854	1	52.71	41.40	844.00	662.88	15.504	12.177
1/16	3.838	3.015	61.46	48.27	1.1289	.8866	1/16	54.40	42.73	871.20	684.32	16.000	12.566
1/8	4.303	3.380	68.90	54.11	1.2656	.9940	1/8	56.11	44.07	898.56	705.76	16.504	12.962
3/16	4.795	3.766	76.77	60.29	1.4102	1.1075	3/16	57.85	45.44	926.40	727.52	17.016	13.364
1/4	5.313	4.172	85.06	66.80	1.5625	1.2272	1/4	59.62	46.83	954.72	749.76	17.535	13.772
5/16	5.857	4.600	93.78	73.65	1.7227	1.3530	5/16	61.41	48.23	983.52	772.48	18.063	14.186
3/8	6.428	5.049	102.91	80.83	1.8906	1.4849	3/8	63.23	49.66	1012.48	795.20	18.598	14.607
7/16	7.026	5.518	112.48	88.34	2.0664	1.6230	7/16	65.08	51.11	1042.08	818.40	19.141	15.033
1/2	7.650	6.008	122.48	96.19	2.2500	1.7671	1/2	66.95	52.58	1072.16	842.08	19.691	15.466
9/16	8.301	6.519	132.90	104.67	2.4414	1.9175	9/16	68.85	54.07	1116.96	865.92	20.250	15.904
5/8	8.978	7.051	143.74	112.90	2.6406	2.0739	5/8	70.78	55.59	1133.28	890.08	20.816	16.349
11/16	9.682	7.604	155.01	121.74	2.8477	2.2365	11/16	72.73	57.12	1164.64	914.72	21.391	16.800
3/4	10.413	8.178	166.70	130.93	3.0625	2.4053	3/4	74.71	58.67	1196.32	939.52	21.973	17.257
13/16	11.170	8.773	178.83	140.45	3.2852	2.5802	13/16	76.71	60.25	1228.48	964.80	22.563	17.721
7/8	11.953	9.388	191.38	150.30	3.5156	2.7612	7/8	78.74	61.85	1260.96	990.40	23.160	18.190
15/16	12.763	10.024	204.35	160.50	3.7539	2.9483	15/16	80.80	63.46	1293.92	1016.32	23.766	18.665
2	13.600	10.681	217.76	171.04	4.0000	3.1416	2	82.89	65.10	1327.36	1042.40	24.379	19.147
1/16	14.463	11.359	231.52	181.76	4.2539	3.3410	1/16	85.00	66.76	1361.28	1069.12	25.000	19.635
1/8	15.353	12.058	245.76	192.96	4.5156	3.5466	1/8	87.14	68.44	1395.36	1095.84	25.629	20.129
3/16	16.270	12.778	260.48	204.64	4.7852	3.7583	3/16	89.30	70.14	1430.08	1123.20	26.266	20.629
1/4	17.213	13.519	275.52	216.32	5.0625	3.9761	1/4	91.49	71.86	1465.12	1150.72	26.910	21.135
5/16	18.182	14.280	291.04	228.64	5.3477	4.2000	5/16	93.71	73.60	1500.80	1178.72	27.563	21.648
3/8	19.178	15.062	307.04	241.12	5.6406	4.4301	3/8	95.96	75.36	1536.34	1206.88	28.223	22.166
7/16	20.201	15.866	323.36	253.92	5.9414	4.6664	7/16	98.23	77.15	1572.96	1235.36	28.891	22.691
1/2	21.250	16.690	340.16	267.20	6.2500	4.9087	1/2	100.53	78.95	1604.96	1264.32	29.566	23.221
9/16	22.326	17.534	357.44	280.80	6.5664	5.1572	9/16	102.85	80.78	1647.04	1293.60	30.250	23.758
5/8	23.428	18.400	375.04	294.56	6.8906	5.4119	5/8	105.20	82.62	1684.64	1323.04	30.941	24.301
11/16	24.557	19.287	393.12	308.80	7.2227	5.6727	11/16	107.58	84.49	1722.72	1352.96	31.641	24.850
3/4	25.713	20.195	411.68	323.36	7.5625	5.9396	3/4	109.98	86.38	1761.12	1383.20	32.348	25.406
13/16	26.895	21.123	430.56	338.24	7.9102	6.2126	13/16	112.41	88.29	1800.32	1413.90	33.063	25.967
7/8	28.103	22.072	449.92	353.44	8.2656	6.4918	7/8	114.87	90.22	1839.36	1444.64	33.785	26.535
15/16	29.338	23.042	469.76	368.96	8.6289	6.7771	15/16	117.35	92.17	1879.20	1476.00	34.516	27.109
3	30.600	24.033	489.92	384.80	9.0000	7.0686	3	119.86	94.14	1919.36	1507.52	35.254	27.688
							6	122.40	96.13	1960.16	1539.52	36.000	28.274

For weights of iron bars, deduct 2 per cent from the weights of steel bars of the same sizes,
iron weighing 480 pounds per cubic foot.



SQUARE AND ROUND STEEL BARS

WEIGHTS AND AREAS—Cont'd

Based on one cubic foot of steel weighing 489.6 pounds.

SIZE INS.	WEIGHT LBS. PER FOOT		WEIGHT LBS. PER 16 FT. LENGTH		AREA SQUARE INCHES		SIZE INS.	WEIGHT LBS. PER FOOT		WEIGHT LBS. PER 16 FT. LENGTH		AREA SQUARE INCHES	
6	122.40	96.13	1960.16	1539.52	36.000	28.274	9	275.40	216.30	.....	.....	81.000	63.617
1/16	124.96	98.15	2001.12	1571.68	36.754	28.866	1/16	279.24	219.31	.....	.....	82.129	64.504
1/8	127.55	100.18	2042.56	1604.16	37.516	29.465	1/8	283.10	222.35	.....	.....	83.266	65.397
3/16	130.17	102.23	2084.48	1640.96	38.285	30.069	3/16	286.99	225.41	.....	.....	84.410	66.296
1/4	132.81	104.31	2127.04	1670.56	39.063	30.680	1/4	290.91	228.48	.....	.....	85.563	67.201
5/16	135.48	106.41	2169.44	1703.84	39.848	31.296	5/16	294.86	231.58	.....	.....	86.723	68.112
3/8	138.18	108.53	2212.80	1737.92	40.641	31.919	3/8	298.83	234.70	.....	.....	87.891	69.029
7/16	140.90	110.66	2256.32	1772.00	41.441	32.548	7/16	302.83	237.84	.....	.....	89.066	69.953
1/2	143.65	112.82	2300.48	1806.72	42.250	33.183	1/2	306.85	241.00	.....	.....	90.250	70.882
9/16	146.43	115.00	2344.80	1841.60	43.066	33.824	9/16	310.90	244.18	.....	.....	91.441	71.818
5/8	149.23	117.20	2389.60	1876.80	43.891	34.472	5/8	314.98	247.38	.....	.....	92.641	72.760
11/16	152.06	119.43	2434.88	1912.32	44.723	35.125	11/16	319.08	250.61	.....	.....	93.848	73.708
3/4	154.91	121.67	2480.80	1948.48	45.563	35.785	3/4	323.21	253.85	.....	.....	95.063	74.662
13/16	157.79	123.93	2526.72	1984.48	46.410	36.450	13/16	327.37	257.12	.....	.....	96.285	75.622
7/8	160.70	126.22	2573.44	2005.12	47.266	37.122	7/8	331.55	260.40	.....	.....	97.516	76.589
15/16	163.64	128.52	2620.32	2058.08	48.129	37.800	15/16	335.76	263.71	.....	.....	98.754	77.561
7	166.60	130.85	2668.00	2095.52	49.000	38.485	10	340.00	267.04	.....	.....	100.000	78.540
1/16	169.59	133.19	2715.68	2132.80	49.879	39.175	1/16	344.26	270.38	.....	.....	101.254	79.525
1/8	172.60	135.56	2764.00	2170.72	50.766	39.871	1/8	348.55	273.75	.....	.....	102.516	80.516
3/16	175.64	137.95	2812.64	2209.12	51.660	40.574	3/16	352.87	277.14	.....	.....	103.785	81.513
1/4	178.71	140.36	2861.76	2247.68	52.563	41.282	1/4	357.21	280.55	.....	.....	105.063	82.516
5/16	181.81	142.79	2911.36	2286.56	53.473	41.997	5/16	361.58	283.99	.....	.....	106.348	83.525
3/8	184.93	145.24	2961.28	2325.76	54.391	42.718	3/8	365.98	287.44	.....	.....	107.641	84.541
7/16	188.07	147.71	3011.68	2365.44	55.316	43.445	7/16	370.40	290.91	.....	.....	108.941	85.563
1/2	191.25	150.21	3062.56	2405.28	56.250	44.179	1/2	374.85	294.41	.....	.....	110.250	86.590
9/16	194.45	152.72	3113.76	2445.60	57.191	44.918	9/16	379.33	297.92	.....	.....	111.566	87.624
5/8	197.68	155.26	3165.44	2486.08	58.141	45.664	5/8	383.83	301.46	.....	.....	112.891	88.664
11/16	200.93	157.81	3217.60	2527.04	59.098	46.415	11/16	388.36	305.02	.....	.....	114.223	89.710
3/4	204.21	160.39	3270.08	2568.32	60.063	47.173	3/4	392.91	308.59	.....	.....	115.563	90.763
13/16	207.52	162.99	3323.04	2609.92	61.035	47.937	13/16	397.49	312.19	.....	.....	116.910	91.821
7/8	210.85	165.60	3376.48	2651.84	62.016	48.707	7/8	402.10	315.81	.....	.....	118.266	92.886
15/16	214.21	168.24	3430.24	2694.08	63.004	49.483	15/16	406.74	319.45	.....	.....	119.629	93.957
8	217.60	170.90	3484.48	2737.00	64.000	50.265	11	411.40	323.11	.....	.....	121.000	95.033
1/16	221.01	173.58	.....	.....	65.004	51.054	1/16	416.09	326.80	.....	.....	122.379	96.116
1/8	224.45	176.29	.....	.....	66.016	51.849	1/8	420.80	330.50	.....	.....	123.766	97.205
3/16	227.92	179.01	.....	.....	67.035	52.649	3/16	425.54	334.22	.....	.....	125.160	98.301
1/4	231.41	181.75	.....	.....	68.063	53.456	1/4	430.31	337.97	.....	.....	126.563	99.402
5/16	234.93	184.52	.....	.....	69.098	54.269	5/16	435.11	341.73	.....	.....	127.973	100.510
3/8	238.48	187.30	.....	.....	70.141	55.088	3/8	439.93	345.52	.....	.....	129.391	101.623
7/16	242.05	190.11	.....	.....	71.191	55.914	7/16	444.78	349.33	.....	.....	130.816	102.743
1/2	245.65	192.93	.....	.....	72.250	56.745	1/2	449.65	353.16	.....	.....	132.250	103.869
9/16	249.28	195.78	.....	.....	73.316	57.583	9/16	454.55	357.00	.....	.....	133.691	105.001
5/8	252.93	198.65	.....	.....	74.391	58.426	5/8	459.48	360.87	.....	.....	135.141	106.139
11/16	256.61	201.54	.....	.....	75.473	59.276	11/16	464.43	364.76	.....	.....	136.598	107.284
3/4	260.31	204.45	.....	.....	76.563	60.132	3/4	469.41	368.68	.....	.....	138.063	108.434
13/16	264.04	207.38	.....	.....	77.660	60.994	13/16	474.42	372.61	.....	.....	139.535	109.591
7/8	267.80	210.33	.....	.....	78.766	61.863	7/8	479.45	376.56	.....	.....	141.016	110.754
15/16	271.59	213.31	.....	.....	79.879	62.737	15/16	484.51	380.54	.....	.....	142.504	111.923
9	275.40	216.30	.....	.....	81.000	63.617	12	489.60	384.53	.....	.....	144.000	113.098

For weights of iron bars deduct 2 per cent from the weights of Steel Bars of the same sizes,
iron weighing 480 pounds per cubic foot.

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SQUARE EDGE FLATS



$\frac{11}{16}$ " to 2"	wide, advancing by $\frac{1}{8}$ " x any thickness $\frac{1}{8}$ " up to width.
2" to 2 $\frac{1}{2}$ "	" " $\frac{1}{8}$ " x " $\frac{3}{16}$ " to 2" Inclusive.
2 $\frac{3}{4}$ " to 4"	" " $\frac{1}{4}$ " x " $\frac{3}{16}$ " to 2" Inclusive.
4 $\frac{1}{2}$ " to 6"	" " $\frac{1}{2}$ " x " $\frac{3}{16}$ " to 2" Inclusive.
7" to 12"	" " 1" x " $\frac{3}{16}$ " to 2" Inclusive.

NUT FLATS

Nut Steel within the range of Square Edge Flats can be furnished in bar form or some of the smaller sizes can be furnished in coils.

Sizes other than listed will also be considered, depending on quantity required.

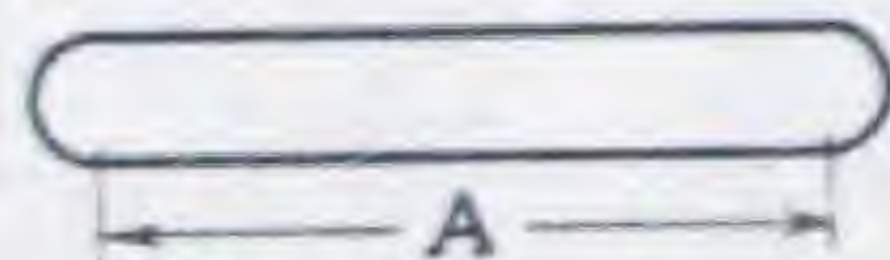
BAND STEEL



No. 10 B.W.G.	$\frac{1}{2}$ " to 1 $\frac{1}{2}$ " wide advancing by $\frac{1}{8}$ "
	1 $\frac{3}{4}$ " to 2" " " $\frac{1}{4}$ "
	2 $\frac{1}{2}$ " to 2 $\frac{3}{4}$ " " " $\frac{1}{4}$ "
	3" to 6" " " $\frac{1}{2}$ "
	7" to 12" " " 1"
No. 12 B.W.G.	$\frac{1}{2}$ " to 3 $\frac{7}{8}$ " " " $\frac{1}{8}$ "
	4" to 6" " " $\frac{1}{2}$ "
No. 14 B.W.G.	$\frac{5}{8}$ " to 3 $\frac{7}{8}$ " " " $\frac{1}{8}$ "
	4" to 5" " " $\frac{1}{2}$ "
No. 16 B.W.G.	$\frac{3}{4}$ " to 2" " " $\frac{1}{8}$ "

Band Steel $\frac{1}{2}$ " to 2" wide is put up in catch weight scroll bundles of 50 to 60 pounds, 2 $\frac{1}{4}$ " to 12" wide in catch weight bundles of 50 to 60 and 80 to 100 pounds.

ROUND EDGE FLATS



Measured on the Flat or Face Surface, as indicated by the letter "A".

Round Edge Flats within the range of Round Edge Tire Steel can be furnished.

Sizes not listed will be considered.

SPRING STEEL

We produce special Steel for Spring purposes. Grades for vehicle, agricultural, automobile, machinery, railway and rods, etc.

It is necessary that enquiries contain the information whether or not the Steel is later to be given Special or Heat Treatment. The requirements of the Railways, etc., as well as the usual specifications are met by our product.

ROUND EDGE TIRE STEEL

Measured on the Flat or Face Surface.

$\frac{5}{8}$ " wide x any thickness $\frac{3}{16}$ " up to $\frac{1}{4}$ " advancing by $\frac{1}{16}$ "
$\frac{3}{4}$ " " x " " $\frac{3}{16}$ " " $\frac{5}{16}$ " " " $\frac{1}{16}$ "
$\frac{7}{8}$ " " x " " $\frac{3}{16}$ " " $\frac{3}{8}$ " " " $\frac{1}{16}$ "
1" " x " " $\frac{3}{16}$ " " $\frac{3}{8}$ " " " $\frac{1}{16}$ "
1 $\frac{1}{8}$ " " x " " $\frac{3}{16}$ " " $\frac{3}{4}$ " " " $\frac{1}{16}$ "
1 $\frac{1}{4}$ " " x " " $\frac{3}{16}$ " " $\frac{3}{4}$ " " " $\frac{1}{16}$ "
1 $\frac{3}{8}$ " " x " " $\frac{3}{16}$ " " $\frac{3}{4}$ " " " $\frac{1}{16}$ "
1 $\frac{1}{2}$ " " x " " $\frac{3}{16}$ " " $\frac{3}{4}$ " " " $\frac{1}{16}$ "
1 $\frac{5}{8}$ " " x " " $\frac{3}{16}$ " " $\frac{7}{8}$ " " " $\frac{1}{16}$ "
1 $\frac{3}{4}$ " " x " " $\frac{3}{16}$ " " $\frac{7}{8}$ " " " $\frac{1}{16}$ "
2" " x " " $\frac{3}{16}$ " " 1" " " $\frac{1}{16}$ "
2 $\frac{1}{4}$ " " x " " $\frac{3}{16}$ " " 1" " " $\frac{1}{16}$ "
2 $\frac{3}{8}$ " " x " " $\frac{3}{16}$ " " 1" " " $\frac{1}{16}$ "
2 $\frac{1}{2}$ " " x " " $\frac{3}{16}$ " " 1" " " $\frac{1}{16}$ "
2 $\frac{3}{4}$ " " x " " $\frac{3}{16}$ " " 1" " " $\frac{1}{16}$ "
3" " x " " $\frac{3}{16}$ " " 1" " " $\frac{1}{16}$ "
3 $\frac{1}{4}$ " " x " " $\frac{3}{16}$ " " 1" " " $\frac{1}{16}$ "
3 $\frac{1}{2}$ " " x " " $\frac{3}{16}$ " " 1" " " $\frac{1}{16}$ "
4" " x " " $\frac{3}{16}$ " " $\frac{1}{2}$ " " " $\frac{1}{16}$ "

Round Edge Tire Steel is regularly supplied in sets of four pieces of the length required for single wheels. It is also stocked in bars 16 feet long.

For Western Territory a set of four consists of:—

2 pieces each 12 and 13 feet long, in sizes 1" x $\frac{3}{16}$ " and smaller, or 2 pieces each 12 and 14 feet long, in sizes 1" x $\frac{1}{4}$ " and larger.

For Eastern Territory a set of four consists of 2 pieces each 12 and 13 feet long in sizes 1 $\frac{3}{8}$ " wide and narrower, or 12 $\frac{1}{2}$ and 13 $\frac{1}{2}$ feet long, in sizes wider than 1 $\frac{3}{8}$ ".

Special lengths will be cut or rolled to order.

SLEIGH SHOE STEEL

$\frac{3}{4}$ " to 1 $\frac{3}{4}$ " wide x $\frac{3}{16}$ " to $\frac{3}{4}$ " thick.
1 $\frac{7}{8}$ " to 2" " x $\frac{3}{16}$ " to 1" "
2 $\frac{1}{4}$ " to 4" " x $\frac{3}{16}$ " to 1" "

Width and thickness advance by $\frac{1}{16}$ ths.

Sleigh Shoe Steel will always be supplied with Square Edge in any of the above sizes, unless Round Edge is specified.

For Round Edge Sleigh Shoe Steel see Round Edge Flats.

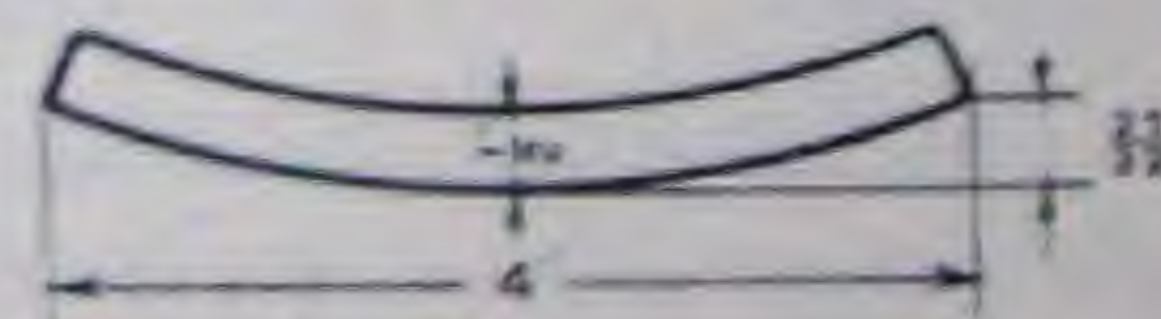
PREMIER SLEIGH SHOE STEEL

Furnished Round Edge Steel in same size as Round Edge Flats, Rolled from 70 to 80 Carbon Steel.

HALF OVAL SLEIGH SHOE STEEL

Furnished in same size as Half Oval Steel.

CONCAVE SLEIGH SHOE STEEL





ROUND EDGE TIRE STEEL

WEIGHT PER FOOT AND PER SET

Size Inches	Weight per foot in Pounds	Approx. Weight per set Pounds Western	Approx. Weight per set Pounds Eastern	Size Inches	Weight per foot in Pounds	Approx. Weight per set Pounds Western	Approx. Weight per set Pounds Eastern	Size Inches	Weight per foot in Pounds	Approx. Weight per set Pounds Western	Approx. Weight per set Pounds Eastern
$\frac{3}{4} \times \frac{1}{8}$	.337	17	17	$1\frac{5}{8} \times \frac{3}{8}$	2.241	117	117	$2\frac{3}{4} \times \frac{1}{4}$	2.414	126	126
$\frac{3}{16}$	.520	26	26	$\frac{7}{16}$	2.646	138	138	$\frac{5}{16}$	3.040	158	158
$\frac{1}{4}$	.712	36	36	$\frac{1}{2}$	3.062	159	159	$\frac{3}{8}$	3.676	191	191
$\frac{5}{16}$	.913	46	46	$\frac{9}{16}$	3.486	181	181	$\frac{7}{16}$	4.321	225	225
$\frac{3}{8}$	1.124	56	56	$\frac{5}{8}$	3.920	204	204	$\frac{1}{2}$	4.974	259	259
				$\frac{3}{4}$	4.816	250	250	$\frac{5}{8}$	6.313	328	328
$\frac{7}{8} \times \frac{3}{16}$	.600	30	30					$\frac{3}{4}$	7.687	400	400
$\frac{1}{4}$	.818	41	41	$1\frac{5}{8} \times \frac{7}{8}$	5.749	299	299	$\frac{7}{8}$	9.098	473	473
$\frac{5}{16}$	1.046	52	52					1	10.547	548	548
$\frac{3}{8}$	1.283	64	64	$1\frac{3}{4} \times \frac{1}{4}$	1.563	81	81	$3 \times \frac{1}{4}$	2.627	137	137
				$\frac{5}{16}$	1.977	103	103	$\frac{5}{16}$	3.306	172	172
$1 \times \frac{3}{16}$	.679	34	34	$\frac{3}{8}$	2.401	125	125	$\frac{3}{8}$	3.994	208	208
$\frac{1}{4}$	.925	48	46	$\frac{7}{16}$	2.833	147	147	$\frac{7}{16}$	4.694	244	244
$\frac{5}{16}$	1.179	62	59	$\frac{1}{2}$	3.274	170	170	$\frac{1}{2}$	5.401	281	281
$\frac{3}{8}$	1.443	75	72	$\frac{9}{16}$	3.726	193	193	$\frac{9}{16}$	6.118	318	318
$\frac{7}{16}$	1.716	90	86	$\frac{5}{8}$	4.186	218	218	$\frac{5}{8}$	6.845	356	356
$\frac{1}{2}$	1.998	104	100	$\frac{3}{4}$	5.135	267	267	$\frac{3}{4}$	8.325	433	433
				$\frac{7}{8}$	6.121	318	318	$\frac{7}{8}$	9.843	512	512
$1\frac{1}{8} \times \frac{3}{16}$	.759	40	38					1	11.398	592	592
$\frac{1}{4}$	1.031	55	52	$2 \times \frac{1}{4}$	1.775	92	92	$3\frac{1}{4} \times \frac{1}{4}$	2.840	148	148
$\frac{5}{16}$	1.312	69	66	$\frac{5}{16}$	2.243	117	117	$\frac{5}{16}$	3.572	186	186
$\frac{3}{8}$	1.602	84	80	$\frac{3}{8}$	2.720	141	141	$\frac{3}{8}$	4.314	224	224
$\frac{7}{16}$	1.902	99	95	$\frac{7}{16}$	3.205	167	167	$\frac{7}{16}$	5.066	263	263
$\frac{1}{2}$	2.211	116	111	$\frac{1}{2}$	3.700	192	192	$\frac{1}{2}$	5.825	303	303
				$\frac{9}{16}$	4.204	219	219	$\frac{5}{8}$	7.377	383	383
$1\frac{1}{4} \times \frac{3}{16}$	.839	44	42	$\frac{5}{8}$	4.718	245	245				
$\frac{1}{4}$	1.137	60	57	$\frac{3}{4}$	5.773	300	300	$3\frac{1}{2} \times \frac{1}{4}$	3.053	159	159
$\frac{5}{16}$	1.445	75	72	$\frac{7}{8}$	6.865	357	357	$\frac{5}{16}$	3.838	200	200
$\frac{3}{8}$	1.762	92	88	1	7.995	416	416	$\frac{3}{8}$	4.633	241	241
								$\frac{7}{16}$	5.438	283	283
$1\frac{1}{4} \times \frac{7}{16}$	2.088	109	104	$2\frac{1}{4} \times \frac{1}{4}$	1.988	103	103	$\frac{1}{2}$	6.250	325	325
$\frac{1}{2}$	2.424	126	121	$\frac{5}{16}$	2.509	130	130	$\frac{5}{8}$	7.908	411	411
$\frac{5}{8}$	3.123	163	156	$\frac{3}{8}$	3.039	158	158	$\frac{3}{4}$	9.601	499	499
$\frac{3}{4}$	3.858	201	193	$\frac{7}{16}$	3.577	186	186	$\frac{7}{8}$	11.332	589	589
				$\frac{1}{2}$	4.124	214	214	1	13.099	681	681
$1\frac{3}{8} \times \frac{1}{4}$	1.244	65	62	$\frac{5}{8}$	5.249	273	273				
$\frac{5}{16}$	1.578	83	79	$\frac{3}{4}$	6.410	333	333	$4 \times \frac{1}{4}$	3.478	181	181
$\frac{3}{8}$	1.922	100	96	$\frac{7}{8}$	7.610	396	396	$\frac{5}{16}$	4.369	227	227
$\frac{7}{16}$	2.274	119	114	1	8.845	460	460	$\frac{3}{8}$	5.271	273	273
$\frac{1}{2}$	2.636	138	132					$\frac{7}{16}$	6.182	321	321
$\frac{5}{8}$	3.388	176	169	$2\frac{1}{2} \times \frac{1}{4}$	2.201	114	114	$\frac{1}{2}$	7.100	369	369
				$\frac{5}{16}$	2.775	143	143	$\frac{5}{8}$	8.972	466	466
$1\frac{1}{2} \times \frac{3}{16}$	.999	52	52	$\frac{3}{8}$	3.357	173	173	$\frac{3}{4}$	10.877	565	565
$\frac{1}{4}$	1.350	70	70	$\frac{7}{16}$	3.949	205	205	$\frac{7}{8}$	12.820	667	667
$\frac{5}{16}$	1.711	89	89	$\frac{1}{2}$	4.549	237	237	1	14.801	770	770
$\frac{3}{8}$	2.081	108	108	$\frac{9}{16}$	5.161	268	268	$4\frac{1}{2} \times \frac{1}{2}$	7.950	413	413
$\frac{7}{16}$	2.460	128	128	$\frac{5}{8}$	5.781	301	301	$\frac{5}{8}$	10.036	521	521
$\frac{1}{2}$	2.849	148	148	$\frac{3}{4}$	7.049	367	367	$\frac{3}{4}$	12.153	631	631
$\frac{9}{16}$	3.247	169	169	$\frac{7}{8}$	8.354	434	434	$\frac{7}{8}$	14.308	745	745
$\frac{5}{8}$	3.654	190	190	1	9.696	504	504	1	16.503	859	859
$\frac{3}{4}$	4.497	234	234								

See page 22 for list of sizes rolled and explanation of eastern and western sets.

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FLAT ROLLED STEEL BARS

WEIGHTS AND AREAS

Based on one cubic foot of steel weighing 489.6 pounds

Thick- ness in Inches	1 Inch Wide			1 1/4 Inches Wide			1 1/2 Inches Wide			1 3/4 Inches Wide			2 Inches Wide		
	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches
	per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet	
1/16	.212	3.39	.063	.265	4.24	.078	.319	5.10	.094	.372	5.95	.109	.425	6.80	.125
1/8	.425	6.80	.125	.531	8.49	.156	.637	10.19	.188	.743	11.88	.219	.849	13.58	.250
3/16	.638	10.21	.188	.797	12.75	.234	.957	15.31	.281	1.11	17.76	.328	1.28	20.48	.375
1/4	.850	14	.250	1.06	17	.313	1.28	20	.375	1.49	24	.438	1.70	27	.500
5/16	1.06	17	.313	1.33	21	.391	1.59	25	.469	1.86	30	.547	2.12	34	.625
3/8	1.28	20	.375	1.59	25	.469	1.92	31	.563	2.23	36	.656	2.55	41	.750
7/16	1.49	24	.438	1.86	30	.547	2.23	36	.656	2.60	42	.766	2.98	48	.875
1/2	1.70	27	.500	2.12	34	.625	2.55	41	.750	2.98	48	.875	3.40	54	1.00
9/16	1.92	31	.563	2.39	38	.703	2.87	46	.844	3.35	54	.984	3.83	61	1.13
5/8	2.12	34	.625	2.65	42	.781	3.19	51	.938	3.72	60	1.09	4.25	68	1.25
11/16	2.34	37	.688	2.92	47	.859	3.51	56	1.03	4.09	65	1.20	4.67	75	1.38
3/4	2.55	41	.750	3.19	51	.938	3.83	61	1.13	4.47	72	1.31	5.10	82	1.50
13/16	2.76	44	.813	3.45	55	1.02	4.14	66	1.22	4.84	77	1.42	5.53	88	1.63
7/8	2.98	48	.875	3.72	60	1.09	4.47	72	1.31	5.20	83	1.53	5.95	95	1.75
15/16	3.19	51	.938	3.99	64	1.17	4.78	76	1.41	5.58	89	1.64	6.38	102	1.88
1	3.40	54	1.00	4.25	68	1.25	5.10	82	1.50	5.95	95	1.75	6.80	109	2.00
1 1/16	3.61	58	1.06	4.52	72	1.33	5.42	87	1.59	6.32	101	1.86	7.22	116	2.13
1 1/8	3.83	61	1.13	4.78	76	1.41	5.74	92	1.69	6.70	107	1.97	7.65	123	2.25
1 3/16	4.04	65	1.19	5.05	81	1.48	6.06	97	1.78	7.07	113	2.08	8.08	129	2.38
1 1/4	4.25	68	1.25	5.31	85	1.56	6.38	102	1.88	7.44	119	2.19	8.50	136	2.50
1 5/16	4.46	71	1.31	5.58	89	1.64	6.69	107	1.97	7.81	125	2.30	8.93	143	2.63
1 3/8	4.67	75	1.38	5.84	93	1.72	7.02	112	2.06	8.18	131	2.41	9.35	150	2.75
1 7/16	4.89	78	1.44	6.11	98	1.80	7.34	117	2.16	8.56	137	2.52	9.78	157	2.88
1 1/2	5.10	82	1.50	6.38	102	1.88	7.65	122	2.25	8.93	143	2.63	10.20	163	3.00
1 9/16	5.32	85	1.56	6.64	106	1.95	7.97	128	2.34	9.30	149	2.73	10.63	170	3.13
1 5/8	5.52	88	1.63	6.90	110	2.03	8.29	133	2.44	9.67	155	2.84	11.05	177	3.25
1 11/16	5.74	92	1.69	7.17	115	2.11	8.61	138	2.53	10.04	161	2.95	11.47	184	3.38
1 3/4	5.95	95	1.75	7.44	119	2.19	8.93	143	2.63	10.42	167	3.06	11.90	190	3.50
1 13/16	6.16	98	1.81	7.70	123	2.27	9.24	148	2.72	10.79	173	3.17	12.33	197	3.63
1 7/8	6.38	102	1.88	7.97	128	2.34	9.57	153	2.81	11.15	178	3.28	12.75	204	3.75
1 15/16	6.59	105	1.94	8.24	132	2.42	9.88	158	2.91	11.53	184	3.39	13.18	211	3.88
2	6.80	109	2.00	8.50	136	2.50	10.20	163	3.00	11.90	190	3.50	13.60	218	4.00

The weights shown, per lineal foot, are given for bars rolled to an exact dimension and do not take into consideration the usual tolerances allowed when rolling bars. The actual weight of each bar furnished may run slightly above or below the figure given.

The weights shown for 16 foot bars are figured to the nearest pound, any decimal thereof being omitted.

For the weights of iron bars deduct 2 per cent from the weights of steel bars of the same sizes, iron weighing 480 pounds per cubic foot.



FLAT ROLLED STEEL BARS—Cont'd

WEIGHTS AND AREAS

Based on one cubic foot of steel weighing 489.6 pounds.

Thick- ness in Inches	2 1/4 Inches Wide			2 1/2 Inches Wide			2 3/4 Inches Wide			3 Inches Wide			3 1/4 Inches Wide		
	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches
	per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet	
1/16	.478	7.64	.141	.531	8.49	.156	.584	9.34	.172	.637	10.19	.188	.690	11.04	.202
1/8	.956	12.29	.281	1.06	16.96	.313	1.17	18.72	.344	1.28	20.48	.375	1.38	22.08	.406
3/16	1.44	23.04	.422	1.59	25.44	.469	1.75	28.00	.516	1.91	30.56	.563	2.07	33.12	.609
1/4	1.91	31	.563	2.12	34	.625	2.34	37	.688	2.55	41	.750	2.76	44	.813
5/16	2.39	38	.703	2.65	42	.781	2.92	47	.859	3.19	51	.938	3.45	55	1.02
3/8	2.87	46	.844	3.19	51	.938	3.51	56	1.03	3.83	61	1.13	4.15	66	1.22
7/16	3.35	54	.984	3.72	59	1.09	4.09	65	1.20	4.46	71	1.31	4.83	77	1.42
1/2	3.83	61	1.13	4.25	68	1.25	4.67	75	1.38	5.10	82	1.50	5.53	88	1.63
9/16	4.30	69	1.27	4.78	76	1.41	5.26	84	1.55	5.74	92	1.69	6.22	99	1.83
5/8	4.78	76	1.41	5.31	85	1.56	5.84	93	1.72	6.38	102	1.88	6.91	111	2.03
11/16	5.26	84	1.55	5.84	93	1.72	6.43	103	1.89	7.02	112	2.06	7.60	122	2.23
3/4	5.75	92	1.69	6.38	102	1.88	7.02	112	2.06	7.65	122	2.25	8.29	133	2.44
13/16	6.21	99	1.83	6.90	110	2.03	7.60	122	2.23	8.29	133	2.44	8.98	144	2.64
7/8	6.69	107	1.97	7.44	119	2.19	8.18	131	2.41	8.93	143	2.63	9.67	155	2.84
15/16	7.18	115	2.11	7.97	128	2.34	8.77	140	2.58	9.57	153	2.81	10.36	166	3.05
1	7.65	123	2.25	8.50	136	2.50	9.35	150	2.75	10.20	163	3.00	11.05	177	3.25
1 1/16	8.13	130	2.39	9.03	144	2.66	9.93	159	2.92	10.84	173	3.19	11.74	188	3.45
1 1/8	8.61	138	2.53	9.57	153	2.81	10.52	168	3.09	11.48	182	3.38	12.43	199	3.66
1 3/16	9.09	145	2.67	10.10	162	2.97	11.11	178	3.27	12.12	194	3.56	13.12	210	3.86
1 1/4	9.57	153	2.81	10.63	170	3.13	11.69	187	3.44	12.75	204	3.75	13.81	221	4.06
1 5/16	10.04	161	2.95	11.16	179	3.28	12.27	196	3.61	13.39	214	3.94	14.50	232	4.27
1 3/8	10.52	168	3.09	11.69	187	3.44	12.85	206	3.78	14.03	227	4.13	15.20	243	4.47
1 7/16	11.00	176	3.23	12.22	196	3.59	13.44	215	3.95	14.66	234	4.31	15.88	254	4.67
1 1/2	11.48	184	3.38	12.75	204	3.75	14.03	227	4.13	15.30	245	4.50	16.58	265	4.88
1 9/16	11.95	191	3.52	13.28	212	3.91	14.61	234	4.30	15.94	255	4.69	17.27	276	5.08
1 5/8	12.43	199	3.66	13.81	221	4.06	15.19	243	4.47	16.58	265	4.88	17.96	287	5.28
1 11/16	12.91	207	3.80	14.34	229	4.22	15.78	252	4.64	17.22	276	5.06	18.65	298	5.48
1 3/4	13.40	214	3.94	14.88	238	4.38	16.37	262	4.81	17.85	286	5.25	19.34	309	5.69
1 13/16	13.86	222	4.08	15.40	240	4.53	16.95	271	4.98	18.49	296	5.44	20.03	320	5.89
1 7/8	14.34	229	4.22	15.94	255	4.69	17.53	280	5.16	19.13	306	5.63	20.72	332	6.09
1 15/16	14.83	237	4.36	16.47	263	4.84	18.12	290	5.33	19.77	316	5.81	21.41	343	6.30
2	15.30	245	4.50	17.00	272	5.00	18.70	299	5.50	20.40	326	6.00	22.10	354	6.50

The weights shown, per lineal foot, are given for bars rolled to an exact dimension and do not take into consideration the usual tolerances allowed when rolling bars. The actual weight of each bar furnished may run slightly above or below the figure given.

The weights shown for 16 foot bars are figured to the nearest pound, any decimal thereof being omitted.

*For the weights of iron bars deduct 2 per cent from the weights of steel bars of the same sizes,
iron weighing 480 pounds per cubic foot*



FLAT ROLLED STEEL BARS—Cont'd

WEIGHTS AND AREAS

Based on one cubic foot of steel weighing 489.6 pounds.

Thick- ness in Inches	3 1/2 Inches Wide			3 3/4 Inches Wide			4 Inches Wide			4 1/4 Inches Wide			4 1/2 Inches Wide		
	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches
	per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet	
1/16	.743	11.89	.219	.797	12.75	.234	.849	13.58	.250	.902	14.46	.266	.956	15	.281
1/8	1.49	23.84	.438	1.59	25.44	.469	1.70	27.20	.500	1.81	28.39	.531	1.92	31	.563
3/16	2.23	36	.656	2.39	38	.703	2.55	41	.750	2.71	43	.797	2.87	46	.844
1/4	2.98	48	.875	3.19	51	.938	3.40	54	1.00	3.61	58	1.06	3.83	61	1.13
5/16	3.72	59	1.09	3.99	64	1.17	4.25	68	1.25	4.52	72	1.33	4.78	76	1.41
3/8	4.47	72	1.31	4.78	76	1.41	5.10	82	1.50	5.42	87	1.59	5.74	92	1.69
7/16	5.20	83	1.53	5.58	89	1.64	5.95	95	1.75	6.32	101	1.86	6.70	107	1.97
1/2	5.95	95	1.75	6.38	102	1.88	6.80	109	2.00	7.22	116	2.13	7.65	122	2.25
9/16	6.70	107	1.97	7.17	115	2.11	7.65	122	2.25	8.13	130	2.39	8.61	138	2.53
5/8	7.44	119	2.19	7.97	128	2.34	8.50	136	2.50	9.03	144	2.66	9.57	153	2.81
11/16	8.18	131	2.41	8.76	140	2.58	9.35	149	2.75	9.93	159	2.92	10.52	168	3.09
3/4	8.93	143	2.63	9.57	153	2.81	10.20	163	3.00	10.84	173	3.19	11.48	184	3.38
13/16	9.67	155	2.84	10.36	166	3.05	11.05	177	3.25	11.74	188	3.45	12.43	199	3.66
7/8	10.41	167	3.06	11.16	179	3.28	11.90	190	3.50	12.65	202	3.72	13.39	214	3.94
15/16	11.16	179	3.28	11.95	191	3.52	12.75	204	3.75	13.55	217	3.98	14.34	229	4.22
1	11.90	190	3.50	12.75	204	3.75	13.60	218	4.00	14.45	231	4.25	15.30	245	4.50
1 1/16	12.65	202	3.72	13.55	217	3.98	14.45	231	4.25	15.35	246	4.52	16.26	260	4.78
1 1/8	13.39	214	3.94	14.34	229	4.22	15.30	245	4.50	16.26	260	4.78	17.22	276	5.06
1 3/16	14.13	226	4.16	15.14	242	4.45	16.15	259	4.75	17.16	275	5.05	18.17	291	5.34
1 1/4	14.87	238	4.38	15.94	255	4.69	17.00	272	5.00	18.06	289	5.31	19.13	306	5.63
1 5/16	15.62	250	4.59	16.74	268	4.92	17.85	286	5.25	18.96	303	5.58	20.08	321	5.91
1 3/8	16.36	262	4.81	17.53	280	5.16	18.70	299	5.50	19.87	318	5.84	21.04	337	6.19
1 7/16	17.10	274	5.03	18.33	293	5.39	19.55	313	5.75	20.77	332	6.11	21.99	352	6.47
1 1/2	17.85	286	5.25	19.13	306	5.63	20.40	327	6.00	21.68	377	6.38	22.95	367	6.75
1 9/16	18.60	298	5.47	19.92	319	5.86	21.25	340	6.25	22.58	361	6.64	23.91	383	7.03
1 5/8	19.34	309	5.69	20.72	332	6.09	22.10	354	6.50	23.48	376	6.91	24.87	398	7.31
1 11/16	20.08	321	5.91	21.51	344	6.33	22.95	361	6.75	24.38	390	7.17	25.82	413	7.59
1 3/4	20.83	333	6.13	22.32	357	6.56	23.80	381	7.00	25.29	405	7.44	26.78	428	7.88
1 13/16	21.57	345	6.34	23.11	370	6.80	24.65	394	7.25	26.19	419	7.70	27.73	444	8.16
1 7/8	22.31	357	6.56	23.91	383	7.03	25.50	408	7.50	27.10	434	7.97	28.69	459	8.44
1 15/16	23.06	369	6.78	24.70	395	7.27	26.35	422	7.75	28.00	448	8.23	29.64	474	8.72
2	23.80	381	7.00	25.50	408	7.50	27.20	435	8.00	28.90	462	8.50	30.60	490	9.00

The weights shown, per lineal foot, are given for bars rolled to an exact dimension and do not take into consideration the usual tolerances allowed when rolling bars. The actual weight of each bar furnished may run slightly above or below the figure given.

The weights shown for 16 foot bars are figured to the nearest pound, any decimal thereof being omitted.

For the weights of iron bars deduct 2 per cent from the weights of steel bars of the same sizes, iron weighing 480 pounds per cubic foot.



FLAT ROLLED STEEL BARS—Cont'd

WEIGHTS AND AREAS

Based on one cubic foot of steel weighing 489.6 pounds.

Thick- ness in Inches	4 $\frac{3}{4}$ Inches Wide			5 Inches Wide			5 $\frac{1}{4}$ Inches Wide			5 $\frac{1}{2}$ Inches Wide			5 $\frac{3}{4}$ Inches Wide		
	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches
	per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet	
$\frac{1}{16}$	1.01	16	.297	1.06	17	.313	1.11	18	.328	1.17	19	.344	1.22	20	.359
$\frac{1}{8}$	2.02	33	.594	2.12	34	.625	2.23	36	.656	2.34	38	.688	2.45	39	.719
$\frac{3}{16}$	3.03	48	.891	3.19	51	.938	3.35	54	.984	3.51	56	1.03	3.67	59	1.08
$\frac{1}{4}$	4.04	65	1.19	4.25	68	1.25	4.46	71	1.31	4.67	75	1.38	4.89	78	1.44
$\frac{5}{16}$	5.05	81	1.48	5.31	85	1.56	5.58	89	1.64	5.84	93	1.72	6.11	98	1.80
$\frac{3}{8}$	6.06	97	1.78	6.38	102	1.88	6.69	107	1.97	7.02	112	2.06	7.34	117	2.16
$\frac{7}{16}$	7.07	113	2.08	7.44	119	2.19	7.81	125	2.30	8.18	131	2.41	8.56	137	2.52
$\frac{1}{2}$	8.08	129	2.38	8.50	136	2.50	8.93	143	2.63	9.35	150	2.75	9.77	156	2.88
$\frac{9}{16}$	9.09	145	2.67	9.57	153	2.81	10.04	161	2.95	10.52	168	3.09	11.00	176	3.23
$\frac{5}{8}$	10.10	162	2.97	10.63	170	3.13	11.16	179	3.28	11.69	187	3.44	12.22	196	3.59
$1\frac{1}{16}$	11.11	178	3.27	11.69	187	3.44	12.27	196	3.61	12.85	206	3.78	13.44	215	3.95
$\frac{3}{4}$	12.12	194	3.56	12.75	204	3.75	13.39	214	3.94	14.03	224	4.13	14.67	235	4.31
$1\frac{1}{8}$	13.12	210	3.86	13.81	221	4.06	14.50	232	4.27	15.19	243	4.47	15.88	254	4.67
$\frac{7}{8}$	14.13	226	4.16	14.87	238	4.38	15.62	250	4.59	16.36	262	4.81	17.10	274	5.03
$1\frac{1}{4}$	15.14	242	4.45	15.94	255	4.69	16.74	268	4.92	17.53	280	5.16	18.33	293	5.39
1	16.15	258	4.75	17.00	272	5.00	17.85	286	5.25	18.70	299	5.50	19.55	313	5.75
$1\frac{1}{8}$	17.16	275	5.05	18.06	289	5.31	18.96	303	5.58	19.87	318	5.84	20.77	332	6.11
$1\frac{1}{4}$	18.17	291	5.34	19.13	306	5.63	20.08	321	5.91	21.04	337	6.19	21.99	352	6.47
$1\frac{3}{8}$	19.18	307	5.64	20.19	323	5.94	21.20	339	6.23	22.21	355	6.53	23.22	372	6.83
$1\frac{1}{2}$	20.19	323	5.94	21.25	340	6.25	22.32	357	6.56	23.38	374	6.88	24.44	391	7.19
$1\frac{5}{8}$	21.20	339	6.23	22.32	357	6.56	23.43	375	6.89	24.54	393	7.22	25.66	411	7.55
$1\frac{3}{4}$	22.21	355	6.53	23.38	374	6.88	24.54	393	7.22	25.71	411	7.56	26.88	430	7.91
$1\frac{7}{8}$	23.22	372	6.83	24.44	391	7.19	25.66	411	7.55	26.88	430	7.91	28.10	450	8.27
$1\frac{1}{2}$	24.23	388	7.13	25.50	408	7.50	26.78	428	7.88	28.05	449	8.25	29.33	469	8.63
$1\frac{9}{8}$	25.24	404	7.42	26.57	425	7.81	27.89	446	8.20	29.22	468	8.59	30.55	489	8.98
$1\frac{5}{4}$	26.25	420	7.72	27.63	442	8.13	29.01	464	8.53	30.39	486	8.94	31.77	508	9.34
$1\frac{11}{8}$	27.26	436	8.02	28.69	459	8.44	30.12	482	8.86	31.55	505	9.28	32.99	528	9.70
$1\frac{3}{4}$	28.27	452	8.31	29.75	476	8.75	31.24	500	9.19	32.73	524	9.63	34.22	548	10.06
$1\frac{13}{8}$	29.27	468	8.61	30.81	493	9.06	32.35	518	9.52	33.89	542	9.97	35.43	567	10.42
$1\frac{7}{4}$	30.28	484	8.91	31.87	510	9.38	33.47	536	9.84	35.06	561	10.31	36.65	586	10.78
$1\frac{15}{8}$	31.29	501	9.20	32.94	527	9.69	34.59	553	10.17	36.23	580	10.66	37.88	606	11.14
2	32.30	517	9.50	34.00	544	10.00	35.70	571	10.50	37.40	598	11.00	39.10	626	11.50

The weights shown, per lineal foot, are given for bars rolled to an exact dimension and do not take into consideration the usual tolerances allowed when rolling bars. The actual weight of each bar furnished may run slightly above or below the figure given.

The weights shown for 16 foot bars are figured to the nearest pound, any decimal thereof being omitted.

For the weights of iron bars deduct 2 per cent from the weights of steel bars of the same sizes.
iron weighing 480 pounds per cubic foot.



FLAT ROLLED STEEL BARS—Cont'd

WEIGHTS AND AREAS

Based on one cubic foot of steel weighing 489.6 pounds.

Thick- ness in Inches	6 Inches Wide			6 $\frac{1}{4}$ Inches Wide			6 $\frac{1}{2}$ Inches Wide			6 $\frac{3}{4}$ Inches Wide			7 Inches Wide		
	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches
	per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet	
$\frac{1}{16}$	1.28	20	.375	1.33	21	.391	1.38	22	.406	1.43	23	.422	1.49	24	.438
$\frac{1}{8}$	2.55	41	.750	2.65	42	.781	2.76	44	.813	2.83	46	.844	2.98	48	.875
$\frac{3}{16}$	3.83	61	1.13	3.99	64	1.17	4.14	66	1.22	4.30	69	1.27	4.46	71	1.31
$\frac{1}{4}$	5.10	82	1.50	5.31	85	1.56	5.53	88	1.63	5.74	92	1.69	5.95	95	1.75
$\frac{5}{16}$	6.38	102	1.88	6.64	106	1.95	6.90	110	2.03	7.17	115	2.11	7.44	119	2.19
$\frac{3}{8}$	7.65	122	2.25	7.97	128	2.34	8.29	133	2.44	8.61	138	2.53	8.93	143	2.63
$\frac{7}{16}$	8.93	143	2.63	9.29	149	2.73	9.67	155	2.84	10.04	161	2.95	10.41	167	3.06
$\frac{1}{2}$	10.20	163	3.00	10.63	170	3.13	11.05	177	3.25	11.48	183	3.38	11.90	190	3.50
$\frac{9}{16}$	11.48	184	3.38	11.95	191	3.52	12.43	199	3.66	12.91	207	3.80	13.39	214	3.94
$\frac{5}{8}$	12.75	204	3.75	13.28	212	3.91	13.81	221	4.06	14.34	229	4.22	14.87	238	4.38
$\frac{11}{16}$	14.03	224	4.13	14.61	234	4.30	15.20	243	4.47	15.78	252	4.64	16.36	262	4.81
$\frac{3}{4}$	15.30	245	4.50	15.94	255	4.69	16.58	265	4.88	17.22	276	5.06	17.85	286	5.25
$\frac{13}{16}$	16.58	265	4.88	17.27	276	5.08	17.95	287	5.28	18.65	298	5.48	19.34	309	5.69
$\frac{7}{8}$	17.85	286	5.25	18.60	297	5.47	19.34	309	5.69	20.08	321	5.91	20.83	333	6.13
$\frac{15}{16}$	19.13	306	5.63	19.92	318	5.86	20.72	332	6.09	21.51	344	6.33	22.32	357	6.56
1	20.40	326	6.00	21.25	340	6.25	22.10	354	6.50	22.95	367	6.75	23.80	381	7.00
$\frac{11}{16}$	21.68	347	6.38	22.58	361	6.64	23.48	376	6.91	24.39	390	7.17	25.29	405	7.44
$\frac{11}{8}$	22.95	367	6.75	23.91	383	7.03	24.87	398	7.31	25.82	413	7.59	26.78	428	7.88
$\frac{13}{16}$	24.23	388	7.13	25.23	404	7.42	26.24	420	7.72	27.25	436	8.02	28.26	452	8.31
$\frac{11}{4}$	25.50	408	7.50	26.56	425	7.81	27.62	442	8.13	28.69	459	8.44	29.75	476	8.75
$\frac{15}{16}$	26.78	428	7.88	27.90	446	8.20	29.01	464	8.53	30.12	482	8.86	31.23	500	9.19
$\frac{13}{8}$	28.05	449	8.25	29.22	468	8.59	30.39	486	8.94	31.56	505	9.28	32.72	524	9.63
$\frac{17}{16}$	29.33	469	8.66	30.55	489	8.98	31.77	508	9.34	32.99	528	9.70	34.21	547	10.06
$1\frac{1}{2}$	30.60	490	9.00	31.88	510	9.38	33.15	530	9.75	34.43	551	10.13	35.70	571	10.50
$\frac{19}{16}$	31.88	510	9.38	33.20	531	9.77	34.53	552	10.16	35.86	574	10.55	37.19	595	10.94
$\frac{15}{8}$	33.15	530	9.75	34.53	552	10.16	35.91	575	10.56	37.29	597	10.97	38.67	619	11.38
$\frac{111}{16}$	34.43	551	10.13	35.86	574	10.55	37.30	597	10.97	38.73	620	11.39	40.16	643	11.81
$1\frac{3}{4}$	35.70	571	10.50	37.19	595	10.94	38.68	619	11.38	40.17	643	11.81	41.65	666	12.25
$\frac{113}{16}$	36.98	592	10.88	38.52	616	11.33	40.05	641	11.78	41.60	666	12.23	43.14	690	12.69
$\frac{17}{8}$	38.25	612	11.25	39.85	638	11.72	41.44	663	12.19	43.03	688	12.66	44.63	714	13.13
$\frac{115}{16}$	39.53	632	11.63	41.17	659	12.11	42.82	685	12.59	44.46	711	13.08	46.12	738	13.56
2	40.80	653	12.00	42.50	680	12.50	44.20	707	13.00	45.90	734	13.50	47.60	762	14.00

The weights shown, per lineal foot, are given for bars rolled to an exact dimension and do not take into consideration the usual tolerances allowed when rolling bars. The actual weight of each bar furnished may run slightly above or below the figure given.

The weights shown for 16 foot bars are figured to the nearest pound, any decimal thereof being omitted.

For the weights of iron bars deduct 2 per cent from the weights of steel bars of the same sizes, iron weighing 480 pounds per cubic foot.



FLAT ROLLED STEEL BARS—Cont'd

WEIGHTS AND AREAS

Based on one cubic foot of steel weighing 489.6 pounds.

Thick- ness in Inches	7 1/4 Inches Wide			7 1/2 Inches Wide			7 3/4 Inches Wide			8 Inches Wide			8 1/4 Inches Wide		
	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches
	per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet	
1/16	1.54	.....	.453	1.59	26	.469	1.65	.....	.484	1.70	27	.500	1.75	.....	.516
1/8	3.08	.....	.906	3.18	51	.938	3.29	.....	.969	3.40	54	1.00	3.50	.....	1.03
3/16	4.62	.....	1.36	4.78	76	1.41	4.94	.....	1.45	5.10	82	1.50	5.26	.....	1.55
1/4	6.16	.....	1.81	6.36	102	1.88	6.58	.....	1.94	6.80	109	2.00	7.01	.....	2.06
5/16	7.70	.....	2.27	7.97	128	2.34	8.23	.....	2.42	8.50	136	2.50	8.76	.....	2.58
3/8	9.25	.....	2.72	9.57	152	2.81	9.88	.....	2.91	10.20	163	3.00	10.52	.....	3.09
7/16	10.78	.....	3.17	11.16	179	3.28	11.53	.....	3.39	11.90	190	3.50	12.27	.....	3.61
1/2	12.32	.....	3.63	12.75	204	3.75	13.18	.....	3.88	13.60	218	4.00	14.03	.....	4.13
9/16	13.86	.....	4.08	14.34	229	4.22	14.82	.....	4.36	15.30	245	4.50	15.78	.....	4.64
5/8	15.40	.....	4.53	15.94	255	4.69	16.47	.....	4.84	17.00	272	5.00	17.53	.....	5.16
11/16	16.94	.....	4.98	17.53	280	5.16	18.12	.....	5.33	18.70	299	5.50	19.28	.....	5.67
3/4	18.49	.....	5.44	19.13	306	5.63	19.77	.....	5.81	20.40	326	6.00	21.04	.....	6.19
13/16	20.03	.....	5.89	20.72	332	6.09	21.41	.....	6.30	22.10	354	6.50	22.79	.....	6.70
7/8	21.57	.....	6.34	22.32	357	6.56	23.05	.....	6.78	23.80	381	7.00	24.55	.....	7.22
15/16	23.11	.....	6.80	23.91	383	7.03	24.70	.....	7.27	25.50	408	7.50	26.30	.....	7.73
1	24.65	.....	7.25	25.50	408	7.50	26.35	.....	7.75	27.20	435	8.00	28.05	.....	8.25
1 1/16	26.19	.....	7.70	27.10	434	7.97	28.00	.....	8.23	28.90	462	8.50	29.80	.....	8.77
1 1/8	27.73	.....	8.16	28.68	459	8.44	29.64	.....	8.72	30.60	490	9.00	31.56	.....	9.28
1 3/16	29.27	.....	8.61	30.28	484	8.91	31.29	.....	9.20	32.30	517	9.50	33.31	.....	9.80
1 1/4	30.81	.....	9.06	31.88	510	9.38	32.94	.....	9.69	34.00	544	10.00	35.06	.....	10.31
1 5/16	32.35	.....	9.52	33.48	536	9.84	34.59	.....	10.17	35.70	571	10.50	36.81	.....	10.83
1 3/8	33.89	.....	9.97	35.06	561	10.31	36.23	.....	10.66	37.40	598	11.00	38.57	.....	11.34
1 7/16	35.44	.....	10.42	36.66	587	10.78	37.88	.....	11.14	39.10	626	11.50	40.32	.....	11.86
1 1/2	36.98	.....	10.88	38.26	612	11.25	39.53	.....	11.63	40.80	653	12.00	42.08	.....	12.38
1 9/16	38.51	.....	11.33	39.84	637	11.72	41.17	.....	12.11	42.50	680	12.50	43.83	.....	12.89
1 5/8	40.05	.....	11.78	41.44	662	12.19	42.82	.....	12.59	44.20	707	13.00	45.58	.....	13.41
1 11/16	41.59	.....	12.23	43.03	688	12.66	44.47	.....	13.08	45.90	734	13.50	47.33	.....	13.92
1 3/4	43.14	.....	12.69	44.63	714	13.13	46.12	.....	13.56	47.60	762	14.00	49.09	.....	14.44
1 13/16	44.68	.....	13.14	46.22	740	13.59	47.76	.....	14.05	49.30	789	14.50	50.84	.....	14.95
1 7/8	46.22	.....	13.59	47.82	765	14.06	49.40	.....	14.53	51.00	816	15.00	52.60	.....	15.47
1 15/16	47.76	.....	14.05	49.41	791	14.53	51.05	.....	15.02	52.70	843	15.50	54.35	.....	15.98
2	49.30	.....	14.50	51.00	816	15.00	52.70	.....	15.50	54.40	870	16.00	56.10	.....	16.50

The weights shown, per lineal foot, are given for bars rolled to an exact dimension and do not take into consideration the usual tolerances allowed when rolling bars. The actual weight of each bar furnished may run slightly above or below the figures given.

The weights shown for 16 foot bars are figured to the nearest pound, any decimal thereof being omitted.

For the weights of iron bars deduct 2 per cent from the weights of steel bars of the same sizes, iron weighing 480 pounds per cubic foot.



FLAT ROLLED STEEL BARS—Cont'd

WEIGHTS AND AREAS

Based on one cubic foot of steel weighing 489.6 pounds.

Thick- ness in Inches	8½ Inches Wide			8¾ Inches Wide			9 Inches Wide			9¼ Inches Wide			9½ Inches Wide		
	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches
	per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet	
1/16	1.81	.....	.531	1.86	.....	.547	1.92	31	.563	1.97	.....	.578	2.02	.....	.594
1/8	3.62	.....	1.06	3.72	.....	1.09	3.83	61	1.13	3.92	.....	1.16	4.04	.....	1.19
3/16	5.42	.....	1.59	5.58	.....	1.64	5.74	92	1.69	5.90	.....	1.73	6.06	.....	1.78
1/4	7.22	.....	2.13	7.43	.....	2.19	7.65	122	2.25	7.86	.....	2.31	8.08	.....	2.38
5/16	9.03	.....	2.66	9.29	.....	2.73	9.56	153	2.81	9.83	.....	2.89	10.10	.....	2.97
3/8	10.84	.....	3.19	11.16	.....	3.28	11.48	184	3.38	11.80	.....	3.47	12.12	.....	3.56
7/16	12.64	.....	3.72	13.02	.....	3.83	13.40	214	3.94	13.76	.....	4.05	14.14	.....	4.16
1/2	14.44	.....	4.25	14.87	.....	4.38	15.30	245	4.50	15.13	.....	4.63	16.16	.....	4.75
9/16	16.26	.....	4.78	16.74	.....	4.92	17.22	276	5.06	17.69	.....	5.20	18.18	.....	5.34
5/8	18.06	.....	5.31	18.59	.....	5.47	19.13	306	5.63	19.65	.....	5.78	20.19	.....	5.94
11/16	19.86	.....	5.84	20.45	.....	6.02	21.04	337	6.19	21.62	.....	6.36	22.21	.....	6.53
3/4	21.68	.....	6.38	22.32	.....	6.56	22.96	367	6.75	23.59	.....	6.94	24.23	.....	7.13
13/16	23.48	.....	6.91	24.17	.....	7.11	24.86	398	7.31	25.55	.....	7.52	26.24	.....	7.72
7/8	25.30	.....	7.44	26.04	.....	7.66	26.78	428	7.88	27.52	.....	8.09	28.26	.....	8.31
15/16	27.10	.....	7.97	27.89	.....	8.20	28.69	459	8.44	29.49	.....	8.67	30.28	.....	8.91
1	28.90	.....	8.50	29.75	.....	8.75	30.60	490	9.00	31.45	.....	9.25	32.30	.....	9.50
11/16	30.70	.....	9.03	31.61	.....	9.30	32.52	520	9.56	33.41	.....	9.83	34.32	.....	10.09
13/16	32.52	.....	9.56	33.47	.....	9.84	34.43	551	10.13	35.38	.....	10.41	36.34	.....	10.69
15/16	34.32	.....	10.09	35.33	.....	10.39	36.34	581	10.69	37.35	.....	10.98	38.36	.....	11.28
13/8	36.12	.....	10.63	37.20	.....	10.94	38.26	612	11.25	39.31	.....	11.56	40.37	.....	11.88
15/16	37.93	.....	11.16	39.05	.....	11.48	40.16	643	11.81	41.28	.....	12.14	42.40	.....	12.47
13/8	39.74	.....	11.69	40.91	.....	12.03	42.08	673	12.38	43.25	.....	12.72	44.41	.....	13.06
17/16	41.54	.....	12.22	42.77	.....	12.58	44.00	704	12.94	45.22	.....	13.30	46.44	.....	13.66
13/2	43.35	.....	12.75	44.63	.....	13.13	45.90	734	13.50	47.18	.....	13.88	48.45	.....	14.25
19/16	45.16	.....	13.28	46.49	.....	13.67	47.82	765	14.06	49.14	.....	14.45	50.48	.....	14.84
15/8	46.96	.....	13.81	48.34	.....	14.22	49.73	796	14.63	51.10	.....	15.03	52.49	.....	15.44
111/16	48.76	.....	14.34	50.20	.....	14.77	51.64	826	15.19	53.07	.....	15.61	54.51	.....	16.03
13/4	50.58	.....	14.88	52.07	.....	15.31	53.56	857	15.75	55.04	.....	16.19	56.53	.....	16.63
133/16	52.38	.....	15.41	53.92	.....	15.86	55.46	887	16.31	57.00	.....	16.77	58.54	.....	17.22
17/8	54.20	.....	15.94	55.79	.....	16.41	57.38	918	16.88	58.97	.....	17.34	60.56	.....	17.81
115/16	56.00	.....	16.47	57.64	.....	16.95	59.29	949	17.44	60.94	.....	17.92	62.58	.....	18.41
2	57.80	.....	17.00	59.50	.....	17.50	61.20	979	18.00	62.90	.....	18.50	64.60	.....	19.00

The weights shown, per lineal foot, are given for bars rolled to an exact dimension and do not take into consideration the usual tolerances allowed when rolling bars. The actual weight of each bar furnished may run slightly above or below the figures given.

The weights shown for 16 foot bars are figured to the nearest pound, any decimal thereof being omitted.

For the weights of iron bars deduct 2 per cent. from the weights of steel bars of the same sizes, iron weighing 480 pounds per cubic foot.



FLAT ROLLED STEEL BARS—Cont'd

WEIGHTS AND AREAS

Based on one cubic foot of steel weighing 489.6 pounds.

Thick- ness in Inches	9 $\frac{3}{4}$ Inches Wide			10 Inches Wide			10 $\frac{1}{4}$ Inches Wide			10 $\frac{1}{2}$ Inches Wide			10 $\frac{3}{4}$ Inches Wide		
	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches
	per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet	
$\frac{1}{16}$	2.07	.....	.609	2.12	34	.625	2.18	.....	.641	2.23	.....	.656	2.28	.....	.672
$\frac{1}{8}$	4.14	.....	1.22	4.25	68	1.25	4.36	.....	1.28	4.46	.....	1.31	4.56	.....	1.34
$\frac{3}{16}$	6.22	.....	1.83	6.38	102	1.88	6.54	.....	1.92	6.70	.....	1.97	6.86	.....	2.02
$\frac{1}{4}$	8.29	.....	2.44	8.50	136	2.50	8.71	.....	2.56	8.92	.....	2.63	9.14	.....	2.69
$\frac{5}{16}$	10.36	.....	3.05	10.62	170	3.13	10.89	.....	3.20	11.16	.....	3.28	11.42	.....	3.36
$\frac{3}{8}$	12.44	.....	3.66	12.75	204	3.75	13.07	.....	3.84	13.39	.....	3.94	13.71	.....	4.03
$\frac{7}{16}$	14.51	.....	4.27	14.88	238	4.38	15.25	.....	4.48	15.62	.....	4.59	15.99	.....	4.70
$\frac{1}{2}$	16.58	.....	4.88	17.00	272	5.00	17.42	.....	5.13	17.85	.....	5.25	18.28	.....	5.38
$\frac{9}{16}$	18.65	.....	5.48	19.14	306	5.63	19.61	.....	5.77	20.08	.....	5.91	20.56	.....	6.05
$\frac{5}{8}$	20.72	.....	6.09	21.25	340	6.25	21.78	.....	6.41	22.32	.....	6.56	22.85	.....	6.72
$\frac{11}{16}$	22.79	.....	6.70	23.38	374	6.88	23.96	.....	7.05	24.54	.....	7.22	25.13	.....	7.39
$\frac{3}{4}$	24.86	.....	7.31	25.50	408	7.50	26.14	.....	7.69	26.78	.....	7.88	27.42	.....	8.06
$\frac{13}{16}$	26.94	.....	7.92	27.62	442	8.13	28.32	.....	8.33	29.00	.....	8.53	29.69	.....	8.73
$\frac{7}{8}$	29.01	.....	8.53	29.75	476	8.75	30.50	.....	8.97	31.24	.....	9.19	31.98	.....	9.41
$\frac{15}{16}$	31.08	.....	9.14	31.88	510	9.38	32.67	.....	9.61	33.48	.....	9.84	34.28	.....	10.08
1	33.15	.....	9.75	34.00	544	10.00	34.85	.....	10.25	35.70	.....	10.50	36.55	.....	10.75
$\frac{11}{16}$	35.22	.....	10.36	36.12	578	10.63	37.03	.....	10.89	37.92	.....	11.16	38.83	.....	11.42
$\frac{11}{8}$	37.29	.....	10.97	38.25	612	11.25	39.21	.....	11.53	40.17	.....	11.81	41.12	.....	12.09
$\frac{13}{16}$	39.37	.....	11.58	40.38	646	11.88	41.39	.....	12.17	42.40	.....	12.47	43.40	.....	12.77
$\frac{11}{4}$	41.44	.....	12.19	42.50	680	12.50	43.56	.....	12.81	44.63	.....	13.13	45.69	.....	13.44
$\frac{15}{16}$	43.52	.....	12.80	44.64	714	13.13	45.75	.....	13.45	46.87	.....	13.78	47.97	.....	14.11
$\frac{13}{8}$	45.58	.....	13.41	46.75	748	13.75	47.92	.....	14.09	49.08	.....	14.44	50.25	.....	14.78
$\frac{17}{16}$	47.66	.....	14.02	48.88	782	14.38	50.10	.....	14.73	51.32	.....	15.09	52.54	.....	15.45
$1\frac{1}{2}$	49.73	.....	14.63	51.00	816	15.00	52.28	.....	15.38	53.55	.....	15.75	54.83	.....	16.13
$\frac{19}{16}$	51.80	.....	15.23	53.14	850	15.63	54.46	.....	16.02	55.78	.....	16.41	57.11	.....	16.80
$\frac{15}{8}$	53.87	.....	15.84	55.25	884	16.25	56.63	.....	16.66	58.02	.....	17.06	59.40	.....	17.47
$\frac{111}{16}$	55.94	.....	16.45	57.38	918	16.88	58.81	.....	17.30	60.24	.....	17.72	61.68	.....	18.14
$\frac{13}{4}$	58.01	.....	17.06	59.50	952	17.50	60.99	.....	17.94	62.48	.....	18.38	63.97	.....	18.81
$\frac{113}{16}$	60.09	.....	17.67	61.62	986	18.13	63.17	.....	18.58	64.70	.....	19.03	66.24	.....	19.48
$\frac{17}{8}$	62.16	.....	18.28	63.75	1020	18.75	65.35	.....	19.22	66.94	.....	19.69	68.53	.....	20.16
$\frac{115}{16}$	64.23	.....	18.89	65.88	1054	19.38	67.52	.....	19.86	69.18	.....	20.34	70.83	.....	20.83
2	66.30	.....	19.50	68.00	1084	20.00	69.70	.....	20.50	71.40	.....	21.00	73.10	.....	21.50

The weights shown, per lineal foot, are given for bars rolled to an exact dimension and do not take into consideration the usual tolerances allowed when rolling bars. The actual weight of each bar furnished may run slightly above or below the figures given.

The weights shown for 16 foot bars are figured to the nearest pound, any decimal thereof being omitted.

For the weights of iron bars deduct 2 per cent. from the weights of steel bars of the same sizes, iron weighing 480 pounds per cubic foot.



FLAT ROLLED STEEL BARS—Cont'd

WEIGHTS AND AREAS

Based on one cubic foot of steel weighing 489.6 pounds.

Thick- ness in Inches	11 Inches Wide			11 $\frac{1}{4}$ Inches Wide			11 $\frac{1}{2}$ Inches Wide			11 $\frac{3}{4}$ Inches Wide			12 Inches Wide		
	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches	Wgt. Lbs.		Area Sq. Inches
	per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet		per foot	per 16 feet	
$\frac{1}{16}$	2.34	37	.688	2.39	.....	.703	2.45	.....	.719	2.50	.....	.734	2.55	40	.750
$\frac{1}{8}$	4.67	75	1.38	4.79	.....	1.41	4.90	.....	1.44	5.00	.....	1.47	5.10	81	1.50
$\frac{3}{16}$	7.02	112	2.06	7.17	.....	2.11	7.32	.....	2.16	7.49	.....	2.20	7.65	122	2.25
$\frac{1}{4}$	9.34	149	2.75	9.57	.....	2.81	9.78	.....	2.88	10.00	.....	2.94	10.20	163	3.00
$\frac{5}{16}$	11.68	187	3.44	11.95	.....	3.52	12.22	.....	3.59	12.49	.....	3.67	12.75	204	3.75
$\frac{3}{8}$	14.03	224	4.13	14.35	.....	4.22	14.68	.....	4.31	14.99	.....	4.41	15.30	245	4.50
$\frac{7}{16}$	16.36	262	4.81	16.74	.....	4.92	17.12	.....	5.03	17.49	.....	5.14	17.85	286	5.25
$\frac{1}{2}$	18.70	299	5.50	19.13	.....	5.63	19.55	.....	5.75	19.97	.....	5.88	20.40	326	6.00
$\frac{9}{16}$	21.02	336	6.19	21.51	.....	6.33	22.00	.....	6.47	22.48	.....	6.61	22.95	367	6.75
$\frac{5}{8}$	23.38	374	6.88	23.91	.....	7.03	24.44	.....	7.19	24.97	.....	7.34	25.50	408	7.50
$\frac{11}{16}$	25.70	411	7.56	26.30	.....	7.73	26.88	.....	7.91	27.47	.....	8.08	28.05	445	8.25
$\frac{3}{4}$	28.05	449	8.25	28.68	.....	8.44	29.33	.....	8.63	29.97	.....	8.81	30.60	490	9.00
$\frac{13}{16}$	30.40	486	8.94	31.08	.....	9.14	31.76	.....	9.34	32.46	.....	9.55	33.15	530	9.75
$\frac{7}{8}$	32.72	524	9.63	33.47	.....	9.84	34.21	.....	10.06	34.95	.....	10.28	35.70	571	10.50
$\frac{15}{16}$	35.06	561	10.31	35.86	.....	10.55	36.66	.....	10.78	37.46	.....	11.02	38.25	612	11.25
1	37.40	599	11.00	38.25	.....	11.25	39.10	.....	11.50	39.95	.....	11.75	40.80	653	12.00
$1\frac{1}{16}$	39.74	636	11.69	40.64	.....	11.95	41.54	.....	12.22	42.45	.....	12.48	43.35	694	12.75
$1\frac{1}{8}$	42.08	673	12.38	43.04	.....	12.66	44.00	.....	12.94	44.94	.....	13.22	45.90	734	13.50
$1\frac{3}{16}$	44.42	711	13.06	45.42	.....	13.36	46.44	.....	13.66	47.45	.....	13.95	48.45	775	14.25
$1\frac{1}{4}$	46.76	748	13.75	47.82	.....	14.06	48.88	.....	14.38	49.94	.....	14.69	51.00	816	15.00
$1\frac{5}{16}$	49.08	785	14.44	50.20	.....	14.77	51.32	.....	15.09	52.44	.....	15.42	53.55	857	15.75
$1\frac{3}{8}$	51.42	823	15.13	52.59	.....	15.47	53.76	.....	15.81	54.93	.....	16.16	56.10	898	16.50
$1\frac{7}{16}$	53.76	860	15.81	54.99	.....	16.17	56.21	.....	16.53	57.43	.....	16.89	58.65	938	17.25
$1\frac{1}{2}$	56.10	898	16.50	57.37	.....	16.88	58.65	.....	17.25	59.93	.....	17.63	61.20	979	18.00
$1\frac{9}{16}$	58.42	935	17.19	59.76	.....	17.58	61.10	.....	17.97	62.43	.....	18.36	63.75	1020	18.75
$1\frac{5}{8}$	60.78	972	17.88	62.16	.....	18.28	63.54	.....	18.69	64.92	.....	19.09	66.30	1061	19.50
$1\frac{11}{16}$	63.10	1010	18.56	64.55	.....	18.98	65.98	.....	19.41	67.42	.....	19.83	68.85	1102	20.25
$1\frac{3}{4}$	65.45	1047	19.25	66.93	.....	19.69	68.43	.....	20.13	69.92	.....	20.56	71.40	1142	21.00
$1\frac{13}{16}$	67.80	1085	19.94	69.33	.....	20.39	70.86	.....	20.84	72.41	.....	21.30	73.95	1183	21.75
$1\frac{7}{8}$	70.12	1122	20.63	71.72	.....	21.09	73.31	.....	21.56	74.90	.....	22.03	76.50	1224	22.50
$1\frac{15}{16}$	72.46	1159	21.31	74.11	.....	21.80	75.76	.....	22.28	77.41	.....	22.77	79.05	1265	23.25
2	74.80	1197	22.00	76.50	.....	22.50	78.20	.....	23.00	79.90	.....	23.50	81.60	1306	24.00

The weights shown, per lineal foot, are given for bars rolled to an exact dimension and do not take into consideration the usual tolerances allowed when rolling bars. The actual weight of each bar furnished may run slightly above or below the figures given.

The weights shown for 16 foot bars are figured to the nearest pound, any decimal thereof being omitted.

For the weights of iron bars deduct 2 per cent from the weights of steel bars of the same sizes, iron weighing 480 pounds per cubic foot.

BARS—Cont'd

SHARP



OVALS

Sizes, Inches	Weight per foot in pounds	Sizes, Inches	Weight per foot in pounds
$\frac{1}{2} \times \frac{3}{16}$	.218	$\frac{3}{4} \times \frac{11}{32}$	.608
$\frac{1}{2} \times \frac{7}{32}$	.257	$\frac{3}{4} \times \frac{3}{8}$	.668
$\frac{1}{2} \times \frac{1}{4}$	.297	$\frac{3}{4} \times \frac{13}{32}$	.729
$\frac{1}{2} \times \frac{9}{32}$	.338	$\frac{3}{4} \times \frac{7}{16}$	.792
$\frac{1}{2} \times \frac{5}{16}$	.380	$\frac{3}{4} \times \frac{1}{2}$	.921
$\frac{9}{16} \times \frac{3}{16}$	.244	$\frac{7}{8} \times \frac{1}{4}$	.504
$\frac{9}{16} \times \frac{7}{32}$	.287	$\frac{7}{8} \times \frac{9}{32}$	.569
$\frac{9}{16} \times \frac{1}{4}$	.331	$\frac{7}{8} \times \frac{5}{16}$	.635
$\frac{9}{16} \times \frac{9}{32}$	.376	$\frac{7}{8} \times \frac{11}{32}$	.702
$\frac{9}{16} \times \frac{5}{16}$	.422	$\frac{7}{8} \times \frac{3}{8}$	.770
$\frac{5}{8} \times \frac{3}{16}$	.270	$\frac{7}{8} \times \frac{13}{32}$	.839
$\frac{5}{8} \times \frac{7}{32}$	.317	$\frac{7}{8} \times \frac{7}{16}$	.909
$\frac{5}{8} \times \frac{1}{4}$	.365	$\frac{7}{8} \times \frac{1}{2}$	1.054
$\frac{5}{8} \times \frac{9}{32}$	.414	1 x $\frac{1}{4}$	.574
$\frac{5}{8} \times \frac{5}{16}$	.464	1 x $\frac{9}{32}$	.648
$\frac{5}{8} \times \frac{11}{32}$	.515	1 x $\frac{5}{16}$	.722
$\frac{5}{8} \times \frac{3}{8}$	.568	1 x $\frac{11}{32}$	.797
$\frac{3}{4} \times \frac{3}{16}$	.319	1 x $\frac{3}{8}$	.873
$\frac{3}{4} \times \frac{7}{32}$	.371	1 x $\frac{13}{32}$	.950
$\frac{3}{4} \times \frac{1}{4}$	.435	1 x $\frac{7}{16}$	1.029
$\frac{3}{4} \times \frac{9}{32}$	.492	1 x $\frac{1}{2}$	1.188
$\frac{3}{4} \times \frac{5}{16}$	.550	1 x $\frac{9}{16}$	1.353
		1 x $\frac{5}{8}$	1.522

BLUNT



OVALS

Sizes, Inches	Weight per foot in pounds	Sizes, Inches	Weight per foot in pounds
$\frac{1}{2} \times \frac{3}{16}$	.250	$\frac{3}{4} \times \frac{1}{4}$	.474
$\frac{1}{2} \times \frac{7}{32}$	.292	$\frac{3}{4} \times \frac{9}{32}$	.527
$\frac{1}{2} \times \frac{1}{4}$	.334	$\frac{3}{4} \times \frac{5}{16}$	.596
$\frac{1}{2} \times \frac{9}{32}$	.376	$\frac{3}{4} \times \frac{11}{32}$	.656
$\frac{1}{2} \times \frac{5}{16}$	.418	$\frac{3}{4} \times \frac{3}{8}$	.720
$\frac{9}{16} \times \frac{3}{16}$	.282	$\frac{3}{4} \times \frac{13}{32}$	.790
$\frac{9}{16} \times \frac{7}{32}$	.329	$\frac{3}{4} \times \frac{7}{16}$	.844
$\frac{9}{16} \times \frac{1}{4}$	.376	$\frac{7}{8} \times \frac{1}{4}$	.532
$\frac{9}{16} \times \frac{9}{32}$	.423	$\frac{7}{8} \times \frac{9}{32}$	.607
$\frac{9}{16} \times \frac{5}{16}$	.461	$\frac{7}{8} \times \frac{5}{16}$	.687
$\frac{9}{16} \times \frac{3}{8}$	.520	$\frac{7}{8} \times \frac{11}{32}$	.772
$\frac{5}{8} \times \frac{5}{32}$	.253	$\frac{7}{8} \times \frac{3}{8}$	.844
$\frac{5}{8} \times \frac{3}{16}$	.313	$\frac{7}{8} \times \frac{13}{32}$	.909
$\frac{5}{8} \times \frac{7}{32}$	.365	$\frac{7}{8} \times \frac{7}{16}$	.980
$\frac{5}{8} \times \frac{1}{4}$	.417	1 x $\frac{1}{4}$	.623
$\frac{5}{8} \times \frac{9}{32}$	.469	1 x $\frac{9}{32}$	.705
$\frac{5}{8} \times \frac{5}{16}$	.521	1 x $\frac{5}{16}$	.782
$\frac{5}{8} \times \frac{11}{32}$	.557	1 x $\frac{11}{32}$	.865
$\frac{5}{8} \times \frac{3}{8}$	.608	1 x $\frac{3}{8}$	.959
$\frac{3}{4} \times \frac{3}{16}$	.351	1 x $\frac{13}{32}$	1.030
$\frac{3}{4} \times \frac{7}{32}$	.413	1 x $\frac{7}{16}$	1.116
		1 x $\frac{1}{2}$	1.284

HALF

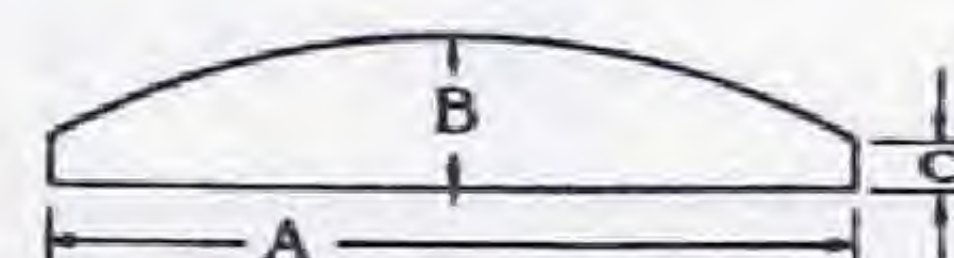


OVALS

Sizes, Inches	Weight per foot in pounds	Sizes, Inches	Weight per foot in pounds
$\frac{1}{2} \times \frac{1}{8}$	.175	$1\frac{3}{8} \times \frac{1}{4}$	.892
$\frac{1}{2} \times \frac{5}{32}$	.206	$1\frac{3}{8} \times \frac{9}{32}$	.998
$\frac{1}{2} \times \frac{3}{16}$	.250	$1\frac{3}{8} \times \frac{5}{16}$	1.102
$\frac{9}{16} \times \frac{1}{8}$	.193	$1\frac{3}{8} \times \frac{11}{32}$	1.221
$\frac{9}{16} \times \frac{5}{32}$	.237	$1\frac{3}{8} \times \frac{3}{8}$	1.314
$\frac{9}{16} \times \frac{3}{16}$	.278	$1\frac{1}{2} \times \frac{1}{4}$	.960
$\frac{5}{8} \times \frac{5}{32}$	.261	$1\frac{1}{2} \times \frac{9}{32}$	1.078
$\frac{5}{8} \times \frac{3}{16}$	.305	$1\frac{1}{2} \times \frac{5}{16}$	1.201
$\frac{5}{8} \times \frac{7}{32}$	.363	$1\frac{1}{2} \times \frac{11}{32}$	1.310
$\frac{5}{8} \times \frac{1}{4}$	.413	$1\frac{1}{2} \times \frac{3}{8}$	1.414
$\frac{3}{4} \times \frac{3}{16}$	.378	$1\frac{1}{2} \times \frac{13}{32}$	1.541
$\frac{3}{4} \times \frac{7}{32}$	.434	$1\frac{1}{2} \times \frac{7}{16}$	1.675
$\frac{3}{4} \times \frac{1}{4}$	.485	$1\frac{1}{2} \times \frac{1}{2}$	1.900
$\frac{7}{8} \times \frac{3}{16}$	.436	$1\frac{3}{4} \times \frac{1}{4}$	1.134
$\frac{7}{8} \times \frac{7}{32}$	.508	$1\frac{3}{4} \times \frac{5}{16}$	1.380
$\frac{7}{8} \times \frac{1}{4}$	.576	$1\frac{3}{4} \times \frac{3}{8}$	1.637
1 x $\frac{1}{8}$	.287	$1\frac{3}{4} \times \frac{7}{16}$	1.928
1 x $\frac{3}{16}$	.491	$1\frac{3}{4} \times \frac{1}{2}$	2.166
1 x $\frac{7}{32}$	.567	2 x $\frac{1}{4}$	1.259
1 x $\frac{1}{4}$	.649	2 x $\frac{5}{16}$	1.553
1 x $\frac{9}{32}$	.732	2 x $\frac{3}{8}$	1.863
1 x $\frac{5}{16}$	.806	2 x $\frac{7}{16}$	2.178
$1\frac{1}{8} \times \frac{3}{16}$	.559	2 x $\frac{1}{2}$	2.476
$1\frac{1}{8} \times \frac{7}{32}$	.654	$2\frac{1}{4} \times \frac{1}{4}$	1.429
$1\frac{1}{8} \times \frac{1}{4}$	.701	$2\frac{1}{4} \times \frac{5}{16}$	1.731
$1\frac{1}{8} \times \frac{9}{32}$	.827	$2\frac{1}{4} \times \frac{3}{8}$	2.084
$1\frac{1}{8} \times \frac{5}{16}$	.898	$2\frac{1}{4} \times \frac{7}{16}$	2.450
$1\frac{1}{8} \times \frac{11}{32}$	.970	$2\frac{1}{4} \times \frac{1}{2}$	2.752
$1\frac{1}{4} \times \frac{3}{16}$	.624	$2\frac{1}{2} \times \frac{1}{4}$	1.625
$1\frac{1}{4} \times \frac{7}{32}$	.711	$2\frac{1}{2} \times \frac{5}{16}$	2.025
$1\frac{1}{4} \times \frac{1}{4}$	.803	$2\frac{1}{2} \times \frac{3}{8}$	2.352
$1\frac{1}{4} \times \frac{9}{32}$	.900	$2\frac{1}{2} \times \frac{7}{16}$	2.701
$1\frac{1}{4} \times \frac{5}{16}$	.985	$2\frac{1}{2} \times \frac{1}{2}$	3.037
		$2\frac{1}{2} \times \frac{3}{4}$	4.8
		3 x $\frac{3}{8}$	2.876
		3 x $\frac{7}{16}$	3.513

Sizes not listed will be considered.

SPECIAL



HALF OVALS

Sizes, Inches			Weight per Foot in Pounds
A	B	C	
$1\frac{7}{8}$	$\frac{9}{32}$	$\frac{1}{16}$	1.292
2	$1\frac{1}{32}$	$\frac{1}{16}$	1.744
2	$\frac{3}{8}$	$\frac{1}{8}$	2.021
$2\frac{1}{4}$	$1\frac{1}{32}$	$\frac{1}{16}$	1.938
$2\frac{1}{4}$	$\frac{7}{16}$	$\frac{1}{8}$	2.596
$2\frac{1}{2}$	$\frac{7}{16}$	$\frac{1}{8}$	2.842
3	$\frac{7}{16}$	$\frac{1}{8}$	3.573
$3\frac{1}{2}$	$\frac{7}{16}$	$\frac{1}{8}$	4.016
4	$\frac{3}{4}$	$\frac{1}{8}$	7.555
4	1	$\frac{1}{8}$	10.005
4	$1\frac{1}{8}$	$\frac{1}{8}$	11.110

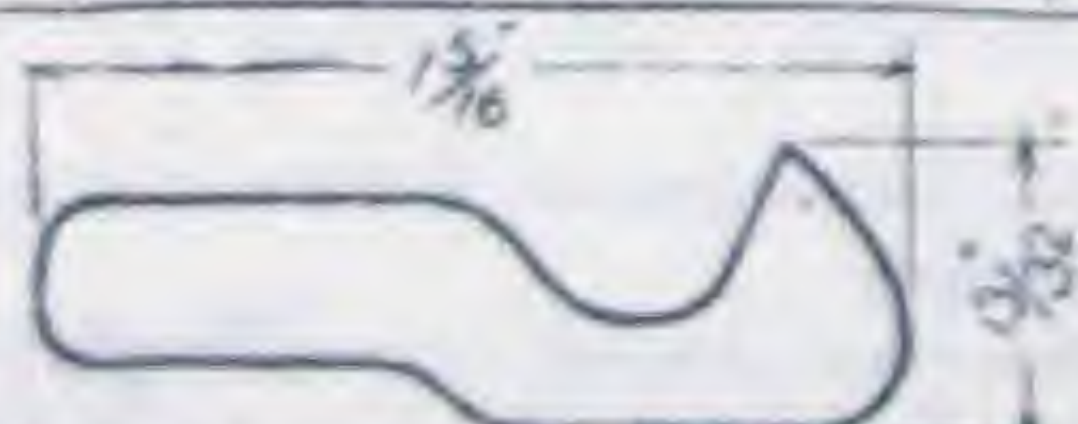
BARS—Cont'd

ANGLES WITH EQUAL LEGS



Size, Inches	Thickness, Inches	Weight per foot in pounds
$\frac{3}{4}$ x $\frac{3}{4}$	$\frac{1}{8}$	0.59
$\frac{3}{4}$ x $\frac{3}{4}$	$\frac{3}{16}$	0.84
$\frac{7}{8}$ x $\frac{7}{8}$	$\frac{1}{8}$	0.70
$\frac{7}{8}$ x $\frac{7}{8}$	$\frac{3}{16}$	1.00
1 x 1	$\frac{1}{8}$	.8
1 x 1	$\frac{3}{16}$	1.2
1 x 1	$\frac{1}{4}$	1.5
$1\frac{1}{8}$ x $1\frac{1}{8}$	$\frac{1}{8}$	0.91
$1\frac{1}{8}$ x $1\frac{1}{8}$	$\frac{3}{16}$	1.32
$1\frac{1}{8}$ x $1\frac{1}{8}$	$\frac{1}{4}$	1.75
$1\frac{1}{4}$ x $1\frac{1}{4}$	$\frac{1}{8}$	1.1
$1\frac{1}{4}$ x $1\frac{1}{4}$	$\frac{3}{16}$	1.5
$1\frac{1}{4}$ x $1\frac{1}{4}$	$\frac{1}{4}$	2.0
$1\frac{1}{4}$ x $1\frac{1}{4}$	$\frac{5}{16}$	2.33
$1\frac{1}{2}$ x $1\frac{1}{2}$	$\frac{1}{8}$	1.3
$1\frac{1}{2}$ x $1\frac{1}{2}$	$\frac{3}{16}$	1.8
$1\frac{1}{2}$ x $1\frac{1}{2}$	$\frac{1}{4}$	2.4
$1\frac{1}{2}$ x $1\frac{1}{2}$	$\frac{5}{16}$	2.9
$1\frac{3}{4}$ x $1\frac{3}{4}$	$\frac{1}{8}$	1.4
$1\frac{3}{4}$ x $1\frac{3}{4}$	$\frac{3}{16}$	2.2
$1\frac{3}{4}$ x $1\frac{3}{4}$	$\frac{1}{4}$	2.8
$1\frac{3}{4}$ x $1\frac{3}{4}$	$\frac{5}{16}$	3.4
2 x 2	$\frac{1}{8}$	1.7
2 x 2	$\frac{3}{16}$	2.5
2 x 2	$\frac{1}{4}$	3.2
2 x 2	$\frac{5}{16}$	4.0
$2\frac{1}{4}$ x $2\frac{1}{4}$	$\frac{3}{16}$	2.8
$2\frac{1}{4}$ x $2\frac{1}{4}$	$\frac{1}{4}$	3.7
$2\frac{1}{4}$ x $2\frac{1}{4}$	$\frac{5}{16}$	4.5
$2\frac{1}{4}$ x $2\frac{1}{4}$	$\frac{3}{8}$	5.3
$2\frac{1}{2}$ x $2\frac{1}{2}$	$\frac{3}{16}$	3.1
$2\frac{1}{2}$ x $2\frac{1}{2}$	$\frac{1}{4}$	4.1
$2\frac{1}{2}$ x $2\frac{1}{2}$	$\frac{5}{16}$	5.0
$2\frac{1}{2}$ x $2\frac{1}{2}$	$\frac{3}{8}$	5.9
3 x 3	$\frac{3}{16}$	3.71
3 x 3	$\frac{1}{4}$	4.9
3 x 3	$\frac{5}{16}$	6.1
3 x 3	$\frac{3}{8}$	7.2
3 x 3	$\frac{7}{16}$	8.30
3 x 3	$\frac{1}{2}$	9.40
$3\frac{1}{2}$ x $3\frac{1}{2}$	$\frac{1}{4}$	5.8
$3\frac{1}{2}$ x $3\frac{1}{2}$	$\frac{5}{16}$	7.2
$3\frac{1}{2}$ x $3\frac{1}{2}$	$\frac{3}{8}$	8.5
$3\frac{1}{2}$ x $3\frac{1}{2}$	$\frac{7}{16}$	9.80
$3\frac{1}{2}$ x $3\frac{1}{2}$	$\frac{1}{2}$	11.10

BARREL



CHIME

Size in Inches	Weight per foot
$1\frac{5}{16}$ x $1\frac{1}{32}$	1.054

Rolled by special arrangement only

HALF



ROUNDS

Diameter $\frac{3}{8}$ " to $\frac{1}{8}$ " inclusive advancing by 16th inches
 " 1" to 2" " " " 8th "
 " 3" " " " "

For weights take half weights of rounds shown on page 20.

ANGLES WITH UNEQUAL LEGS



Size, Inches	Thickness, Inches	Weight per foot in pounds
2 x $1\frac{1}{2}$	$\frac{1}{8}$	1.44
2 x $1\frac{1}{2}$	$\frac{3}{16}$	2.1
2 x $1\frac{1}{2}$	$\frac{1}{4}$	2.8
2 x $1\frac{1}{2}$	$\frac{5}{16}$	3.4
$2\frac{1}{2}$ x $1\frac{1}{2}$	$\frac{3}{16}$	2.44
$2\frac{1}{2}$ x $1\frac{1}{2}$	$\frac{1}{4}$	3.19
$2\frac{1}{2}$ x $1\frac{1}{2}$	$\frac{5}{16}$	3.92
$2\frac{1}{2}$ x 2	$\frac{3}{16}$	2.8
$2\frac{1}{2}$ x 2	$\frac{1}{4}$	3.7
$2\frac{1}{2}$ x 2	$\frac{5}{16}$	4.5
$2\frac{1}{2}$ x 2	$\frac{3}{8}$	5.3
3 x 2	$\frac{3}{16}$	3.1
3 x 2	$\frac{1}{4}$	4.1
3 x 2	$\frac{5}{16}$	5.0
3 x 2	$\frac{3}{8}$	5.9
3 x $2\frac{1}{2}$	$\frac{3}{16}$	3.39
3 x $2\frac{1}{2}$	$\frac{1}{4}$	4.5
3 x $2\frac{1}{2}$	$\frac{5}{16}$	5.6
3 x $2\frac{1}{2}$	$\frac{3}{8}$	6.6
3 x $2\frac{1}{2}$	$\frac{7}{16}$	7.60
3 x $2\frac{1}{2}$	$\frac{1}{2}$	8.50
$3\frac{1}{2}$ x $2\frac{1}{2}$	$\frac{3}{16}$	3.71
$3\frac{1}{2}$ x $2\frac{1}{2}$	$\frac{1}{4}$	4.9
$3\frac{1}{2}$ x $2\frac{1}{2}$	$\frac{5}{16}$	6.1
$3\frac{1}{2}$ x $2\frac{1}{2}$	$\frac{3}{8}$	7.2
$3\frac{1}{2}$ x $2\frac{1}{2}$	$\frac{7}{16}$	8.30
$3\frac{1}{2}$ x $2\frac{1}{2}$	$\frac{1}{2}$	9.40
$3\frac{1}{2}$ x 3	$\frac{3}{16}$	4.2
$3\frac{1}{2}$ x 3	$\frac{1}{4}$	5.4
$3\frac{1}{2}$ x 3	$\frac{5}{16}$	6.6
$3\frac{1}{2}$ x 3	$\frac{3}{8}$	7.9
$3\frac{1}{2}$ x 3	$\frac{7}{16}$	9.10
$3\frac{1}{2}$ x 3	$\frac{1}{2}$	10.20

Sizes not listed will be considered.

TOE CALK STEEL

Square



Edge

Thickness, Inches	Width, Inches							
$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	..	..
$\frac{5}{16}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1
$\frac{3}{8}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	$\frac{7}{8}$	1
$\frac{7}{16}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	..	..	..
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	..	..	..
$\frac{9}{16}$	$\frac{3}{4}$	$\frac{7}{8}$	1	..	..	..	..	..
$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	..	..	..	..	..

HOOP



STEEL

Gauge B.W.G.	Width, Inches							
16	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	3



BARS—Cont'd

NEW BILLET STEEL CONCRETE REINFORCEMENT

Hard, Intermediate and Structural Grades.

The increasing use of concrete, reinforced with steel, makes it necessary to give the closest consideration to the quality of steel used for such reinforcement. Bars rolled from new billets manufactured solely for this purpose allow, during process of manufacture, complete control of physical and chemical properties and thus the quality of the bar can be very exactly indicated.

In the case of re-rolled material no such information can be acquired owing to the material varying greatly in carbon content, the scrap rails accumulating from various sources and made to various specifications.

The superior quality of new billet reinforcement bars may be easily ascertained by subjecting both classes of material to the cold twisting process and then judge of the uniformity of the twists, the tensile strength and the elastic limit.

All our reinforcing conforms to the standard specifications as established in 1930 by the Canadian Engineering Standards Association.

STANDARD SIZES

Established by the Canadian Engineering Standards Ass'n.

Effective July 1st, 1929, the following established sizes of plain and deformed bars for reinforcing purposes were adopted by the members of the Canadian Engineering Standards Association.

Size of Bar in Inches	Area in Square Inches	Approx. Weight per foot in Lbs.
$\frac{1}{4}$ Round	.049	.167
$\frac{3}{8}$ Round	.110	.375
$\frac{1}{2}$ Round	.196	.667
$\frac{1}{2}$ Square	.250	.850
$\frac{5}{8}$ Round	.307	1.045
$\frac{3}{4}$ Round	.442	1.502
$\frac{7}{8}$ Round	.601	2.044
1 Round	.785	2.670
1 Square	1.000	3.400
$1\frac{1}{8}$ Square	1.266	4.303
$1\frac{1}{4}$ Square	1.563	5.312

PLAIN ROUNDS AND SQUARES

Plain Rounds and Squares—large stocks of Hard and Structural grades in C.E.S.A. sizes are carried in stock at both Hamilton and Montreal.

DEFORMED BARS



Deformed bars, both rounds and squares, are rolled in all C.E.S.A. sizes except $\frac{1}{4}$ " round. Ribs are well formed and fill out completely. Deformed bars are rolled to order only. Weights conform to the regular standards for rounds and squares.

BENT BARS



We are equipped at both Hamilton and Montreal with power benders of the latest type for bending bars to special shapes. This equipment places us in a favorable position to give prompt service and to deliver material that is accurately bent. When forwarding your enquiry or order please submit a sketch showing dimensions of bends.

COLD TWISTED BARS



Cold twisting increases the tensile strength of the bar—only "New Billet" steel bars can be twisted cold. Stocks carried at Hamilton and Montreal in Hard and Structural grades. Standard followed is one complete twist in a length equal to not more than twelve times the thickness of the bar.

CONCRETE REINFORCING SPIRALS

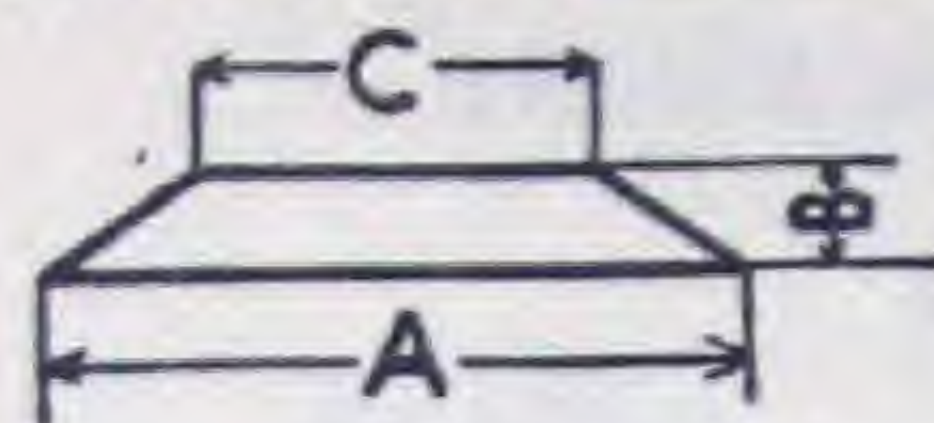


Our column spirals run true to the diameter specified with accurate spacing between spirals. Vertical spacers hold the spirals in position, helping to make the finished spiral conform to the exact dimensions required.

*See also Concrete Reinforcement Rods under Rods and Concrete Mesh under Fence.
For a complete list of weights of Rounds and Squares, see pages 20 and 21.*

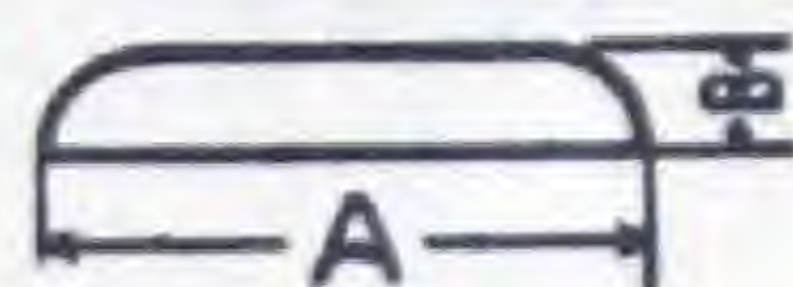
MISCELLANEOUS ROLLED SECTIONS

BOX EDGING BEVELED



Width, Inches A	Thickness, Inches B	C
$\frac{3}{4}$	B.W.G. No. 12, $\frac{1}{8}$	$\frac{7}{16}$ "
$\frac{7}{8}$	B.W.G. No. 12, $\frac{1}{8}$	$\frac{7}{16}$ "
1	B.W.G. No. 10	

BOX EDGING ROUND



Width, Inches A	Thickness, Inches B
$\frac{3}{4}$	B.W.G. No. 12, $\frac{1}{8}$
$\frac{7}{8}$	B.W.G. No. 12, $\frac{1}{8}$

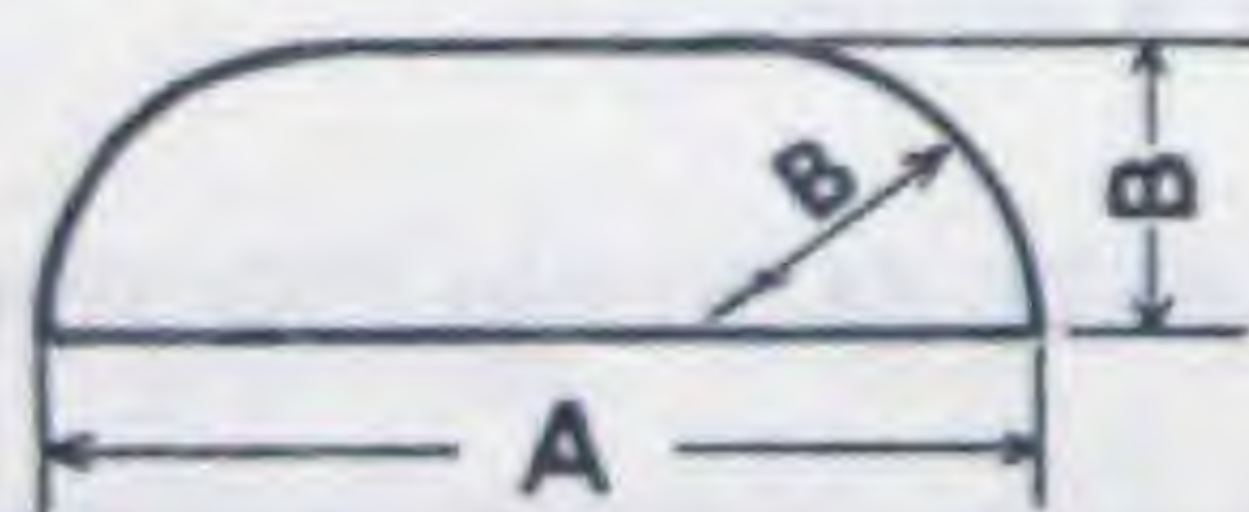
BEVEL EDGE AND BEVEL SHAFT



Width, Inches A	Thickness, Inches B		
$\frac{1}{2}$	$\frac{3}{8}$	$\frac{3}{16}$	$\frac{9}{32}$
$\frac{3}{4}$	$\frac{5}{32}$	$\frac{1}{4}$	
$\frac{7}{8}$	$\frac{1}{8}$	$\frac{1}{4}$	
1	$\frac{1}{4}$	$\frac{1}{4}$	
$1\frac{1}{8}$	$\frac{1}{4}$	$\frac{5}{16}$	
$1\frac{1}{4}$	$\frac{1}{4}$	$\frac{5}{16}$	
$1\frac{1}{2}$	$\frac{3}{16}$	$\frac{1}{4}$	
2	$\frac{3}{16}$	$\frac{1}{4}$	
$2\frac{5}{8}$	$\frac{3}{16}$	$\frac{1}{4}$	

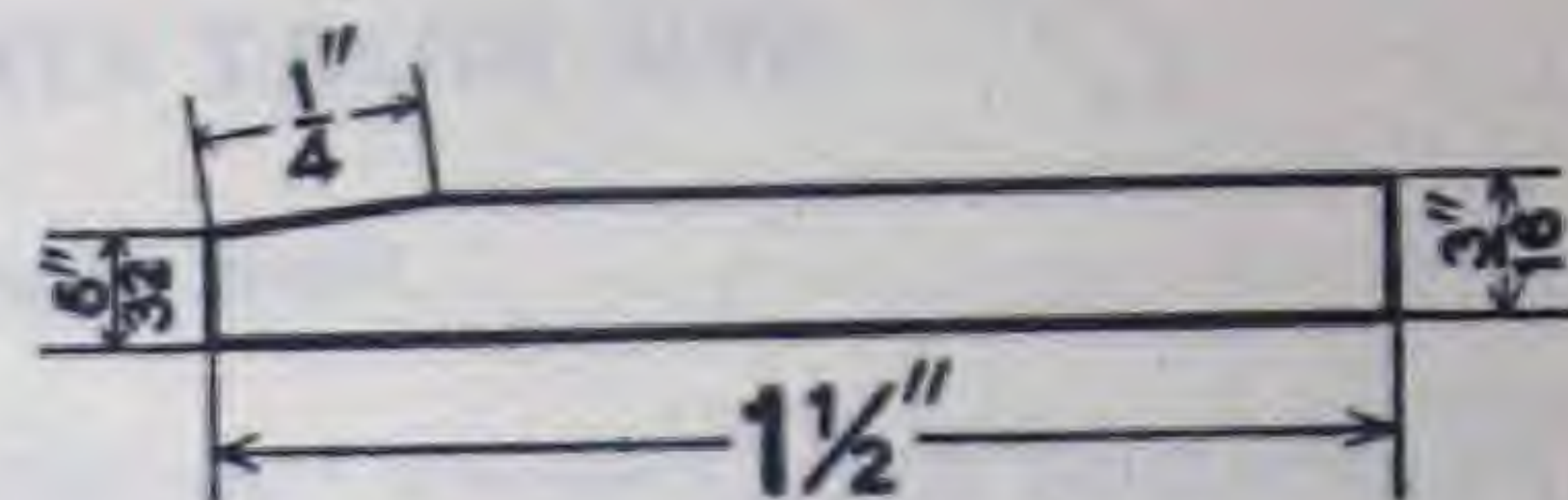
HALF ROUND EDGE FLATS

For Carriage Work



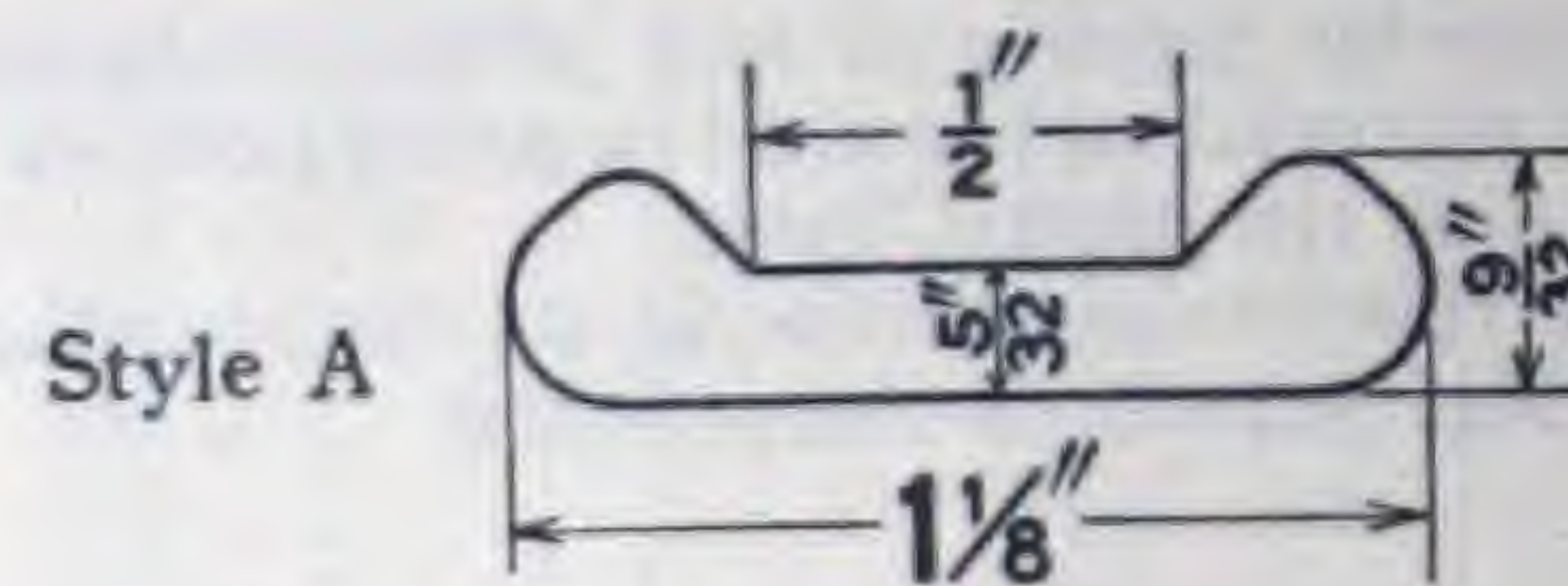
Width, Inches A	Thickness, Inches B				
$\frac{3}{4}$	$\frac{1}{8}$	$\frac{3}{16}$	$\frac{7}{32}$	$\frac{1}{4}$	$\frac{5}{16}$
$\frac{13}{16}$	$\frac{3}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{1}{4}$	
$\frac{7}{8}$	$\frac{3}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{1}{4}$	
1	$\frac{3}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{1}{4}$	
$1\frac{1}{8}$	$\frac{3}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{1}{4}$	
$1\frac{1}{4}$	$\frac{3}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{1}{4}$	
$1\frac{3}{8}$	$\frac{3}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{1}{4}$	

BEVEL EDGE FLAT

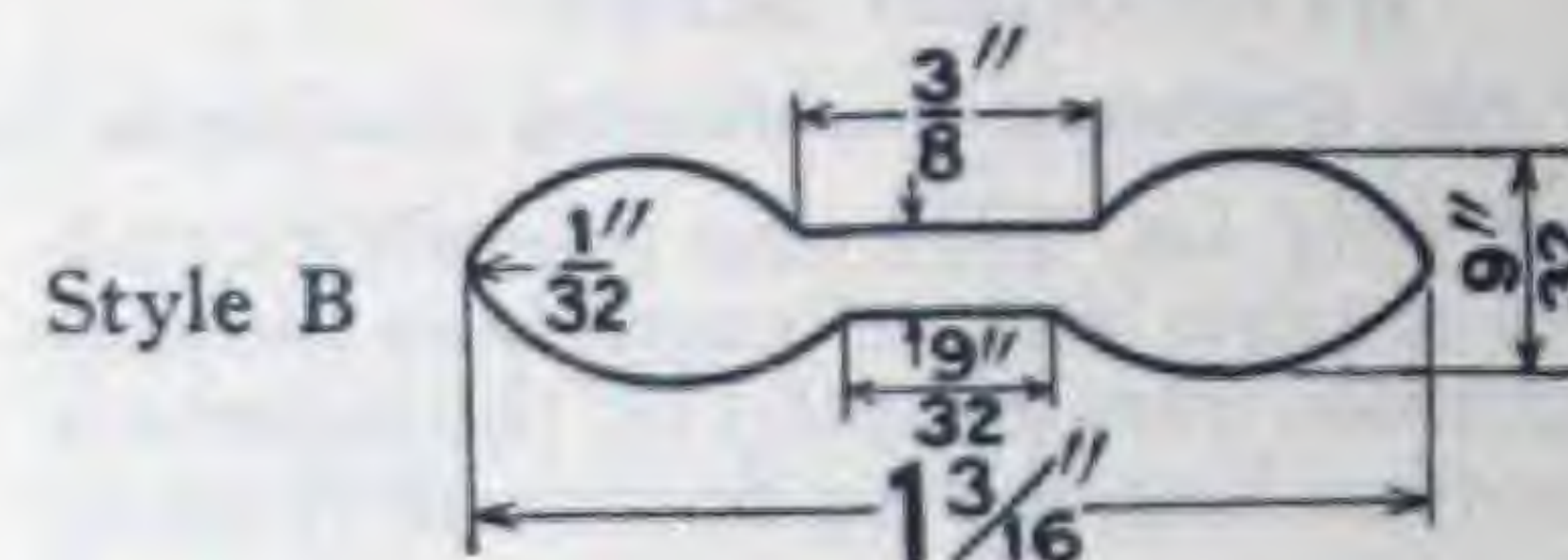


$1\frac{1}{2}$ " x $\frac{3}{16}$ " x $\frac{5}{32}$ " x $\frac{1}{4}$ "

DASH CHANNELS



Style A



Style B

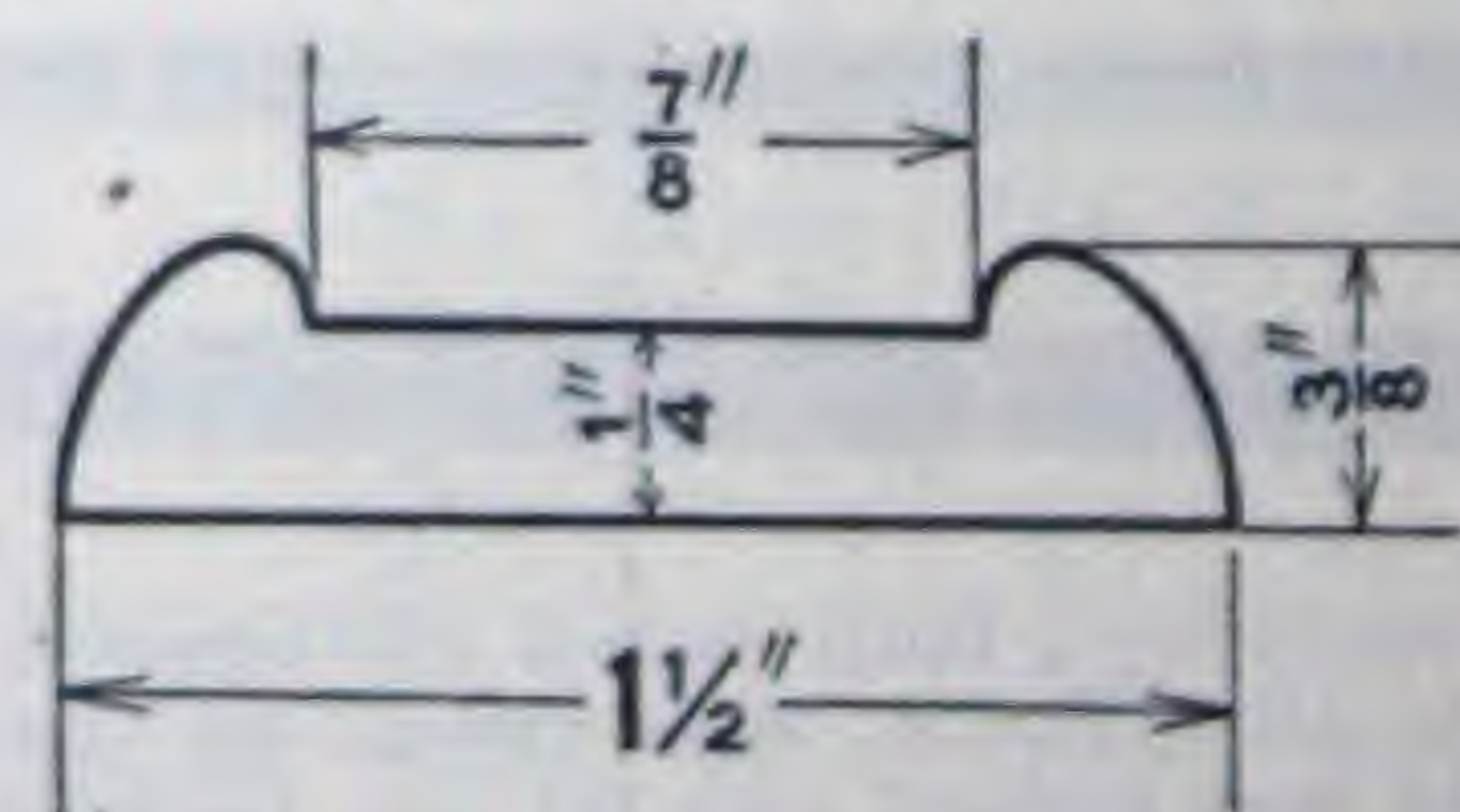
Style	Size, Inches	Weight per Foot, Lbs.
A	$1\frac{1}{8}$ x $\frac{9}{32}$ x $\frac{5}{32}$	.73
B	$1\frac{3}{16}$ x $\frac{9}{32}$ x $\frac{5}{32}$	.77

PIANO BARS



Size, Inches	Weight per Foot, Lbs.
$\frac{5}{8}$ x $\frac{1}{4}$	.27
$\frac{5}{8}$ x $\frac{3}{8}$	.59

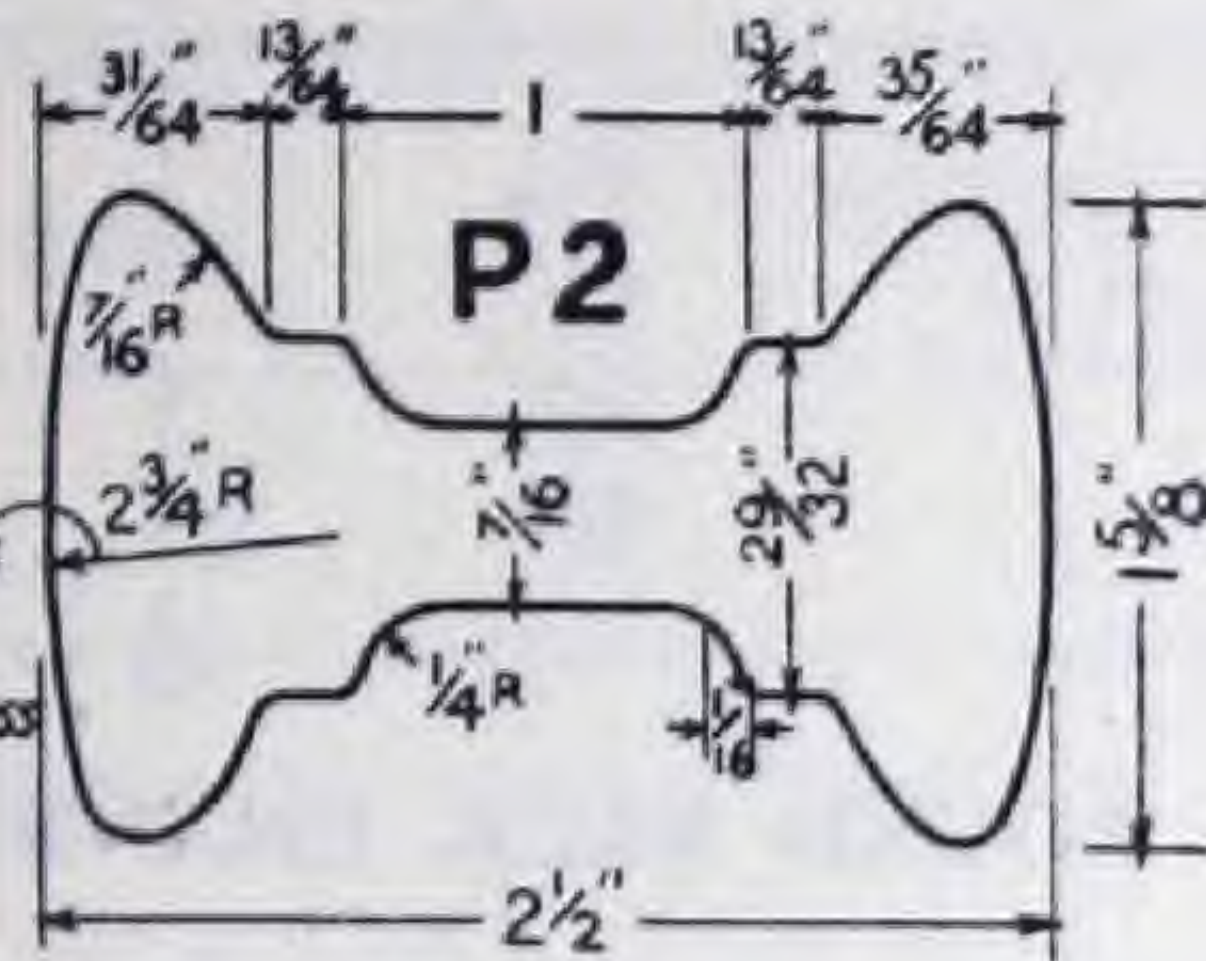
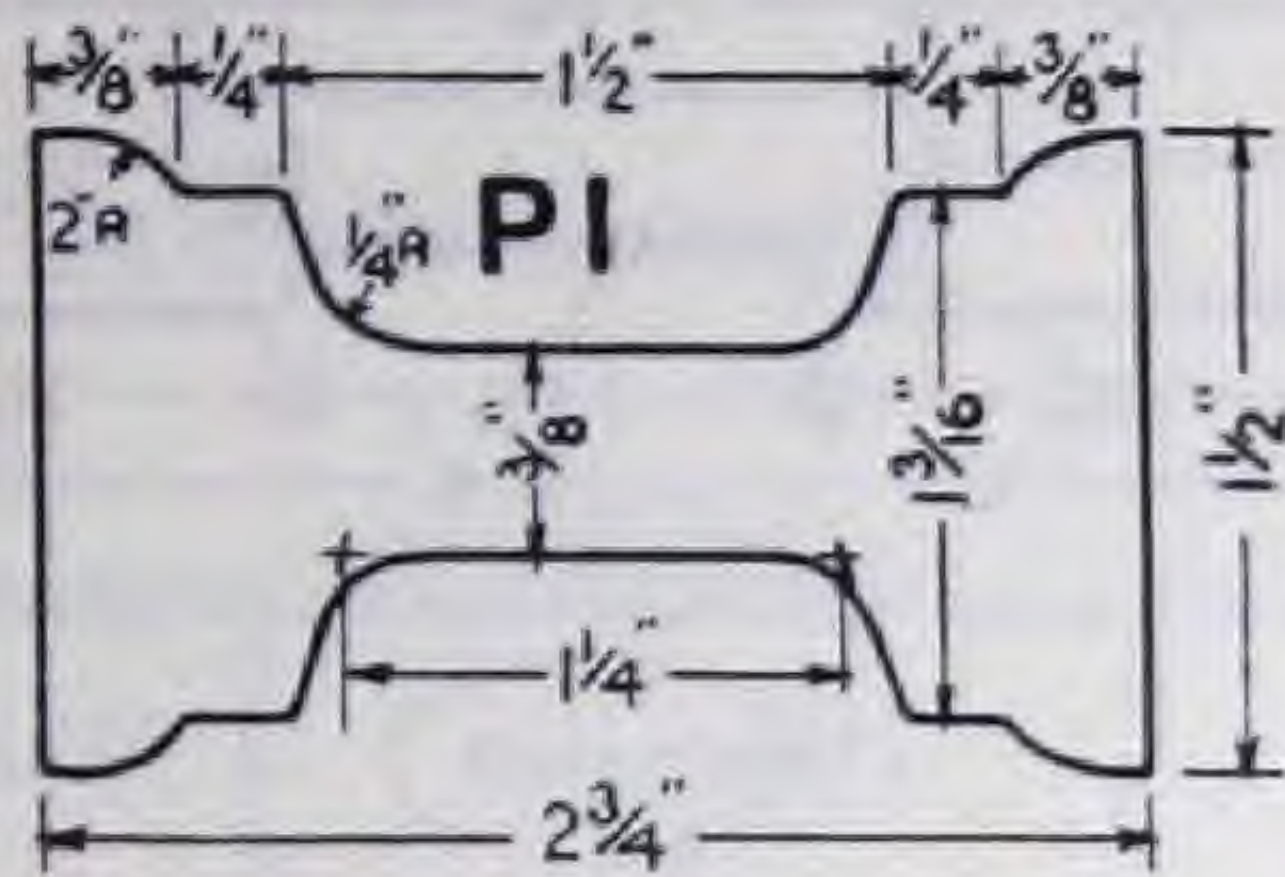
CHANNEL SLEIGH SHOE STEEL



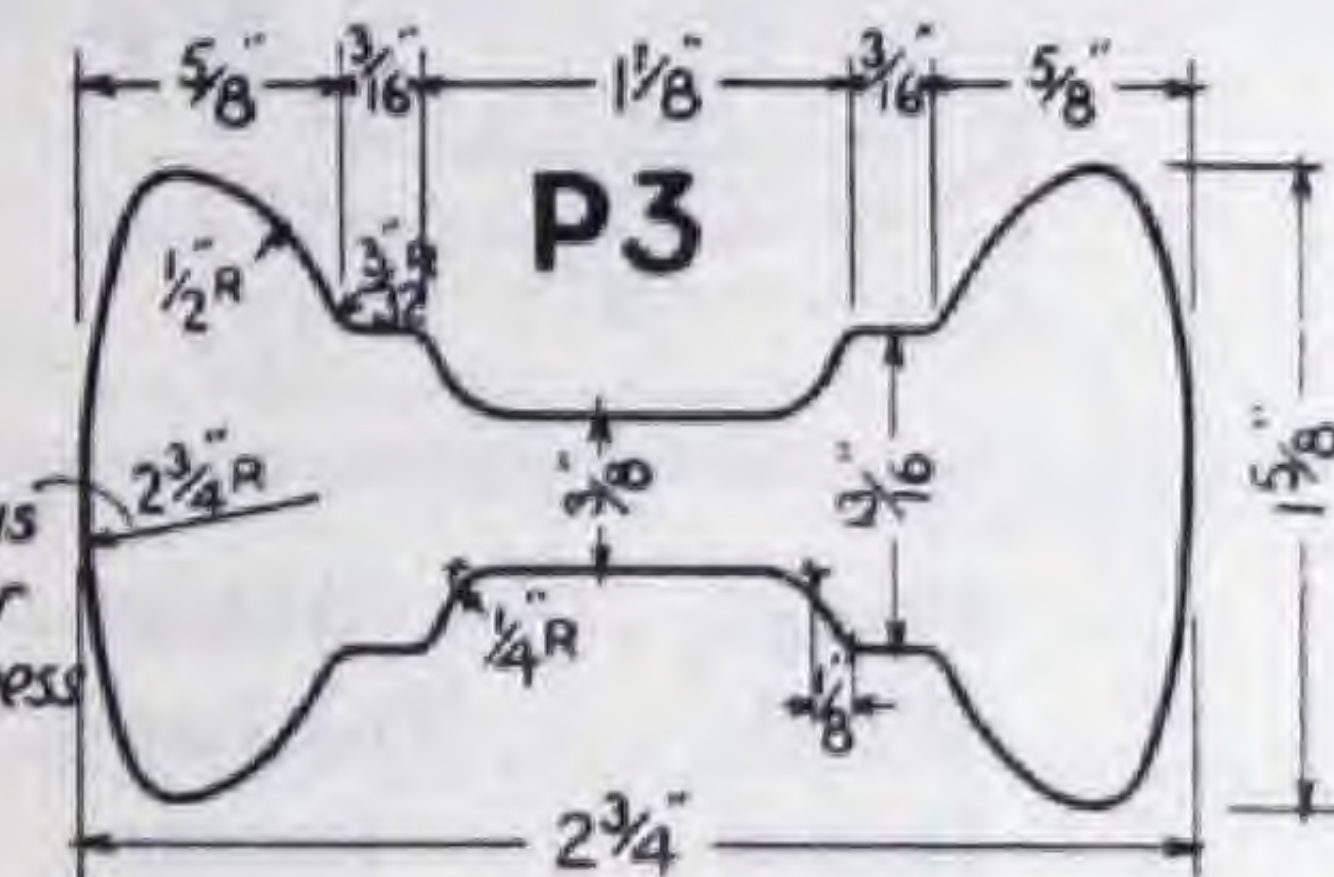
Size, Inches	Weight per Foot, Lbs.
$1\frac{1}{2}$ x $\frac{7}{8}$ x $\frac{3}{8}$ x $\frac{1}{4}$	1.3

MISCELLANEOUS ROLLED SECTIONS—Cont'd

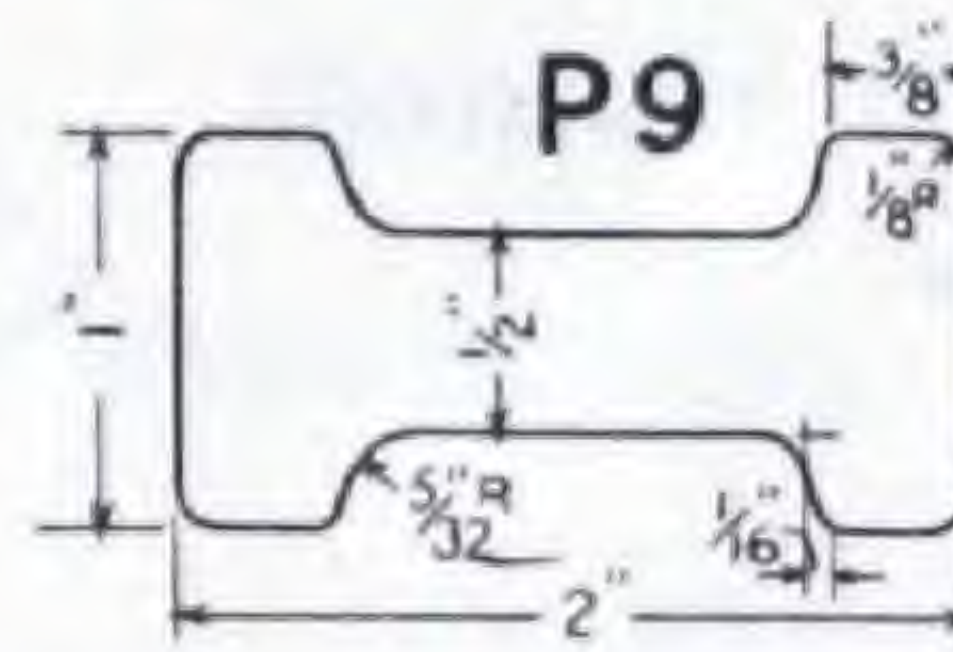
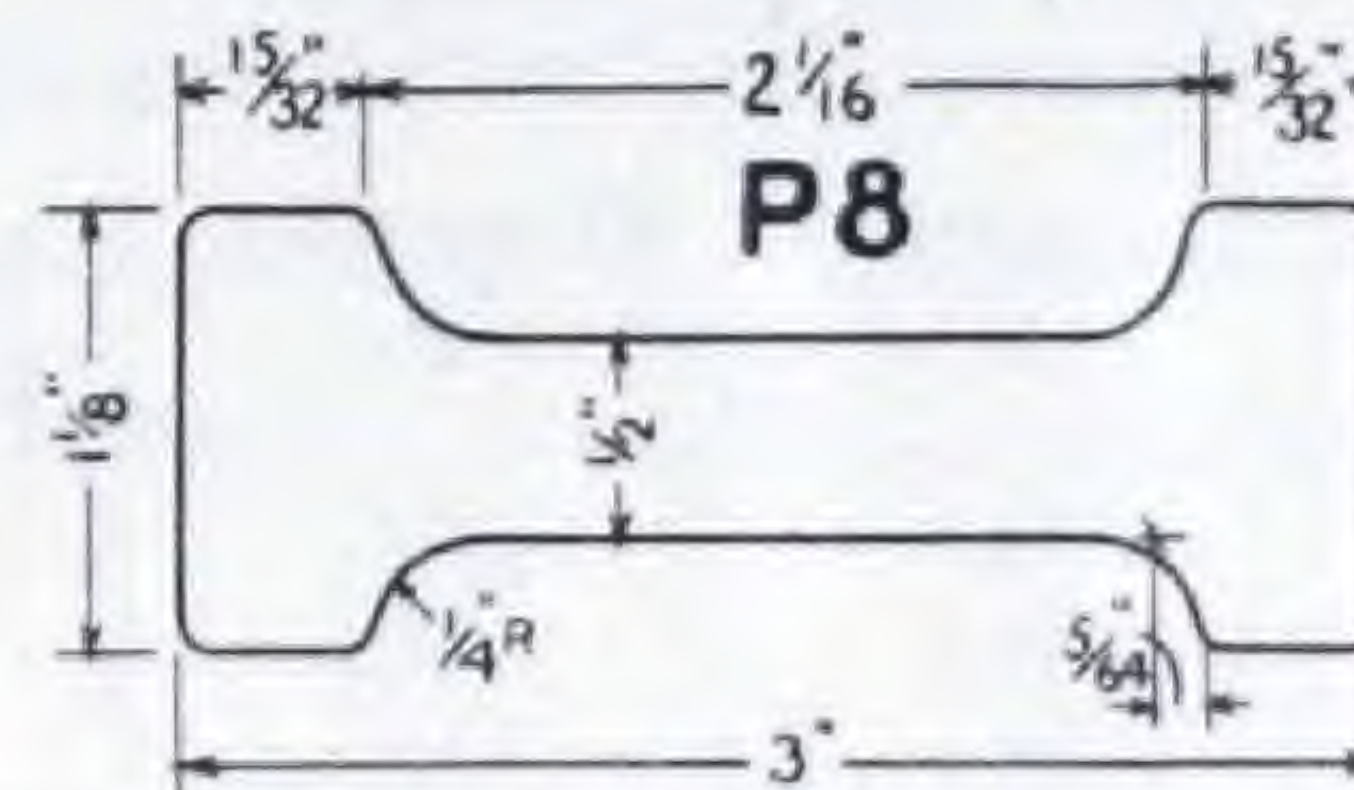
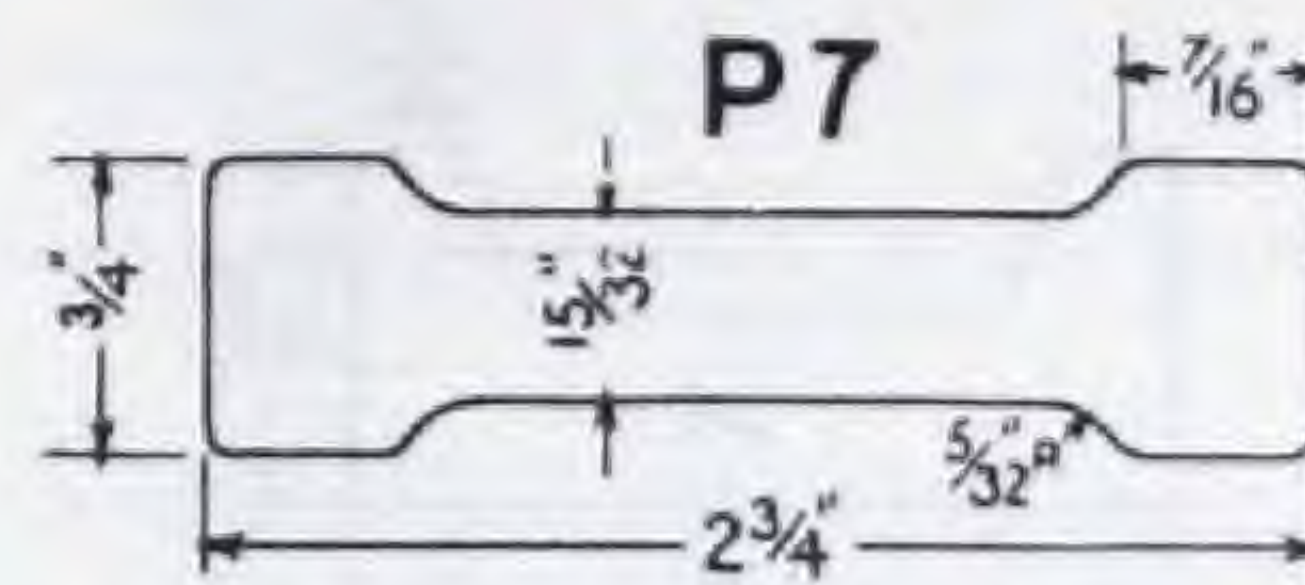
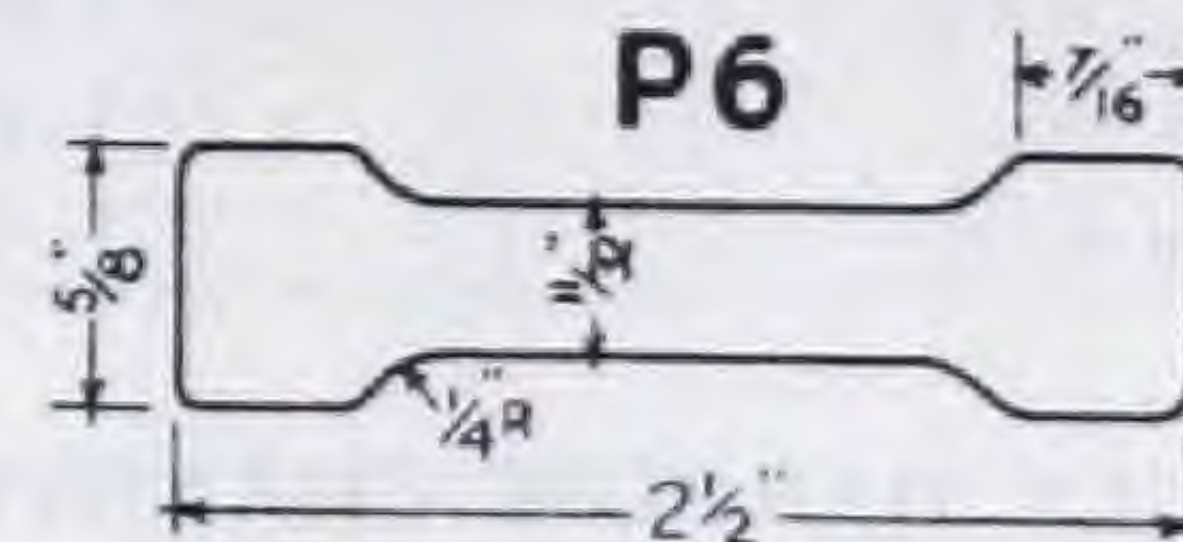
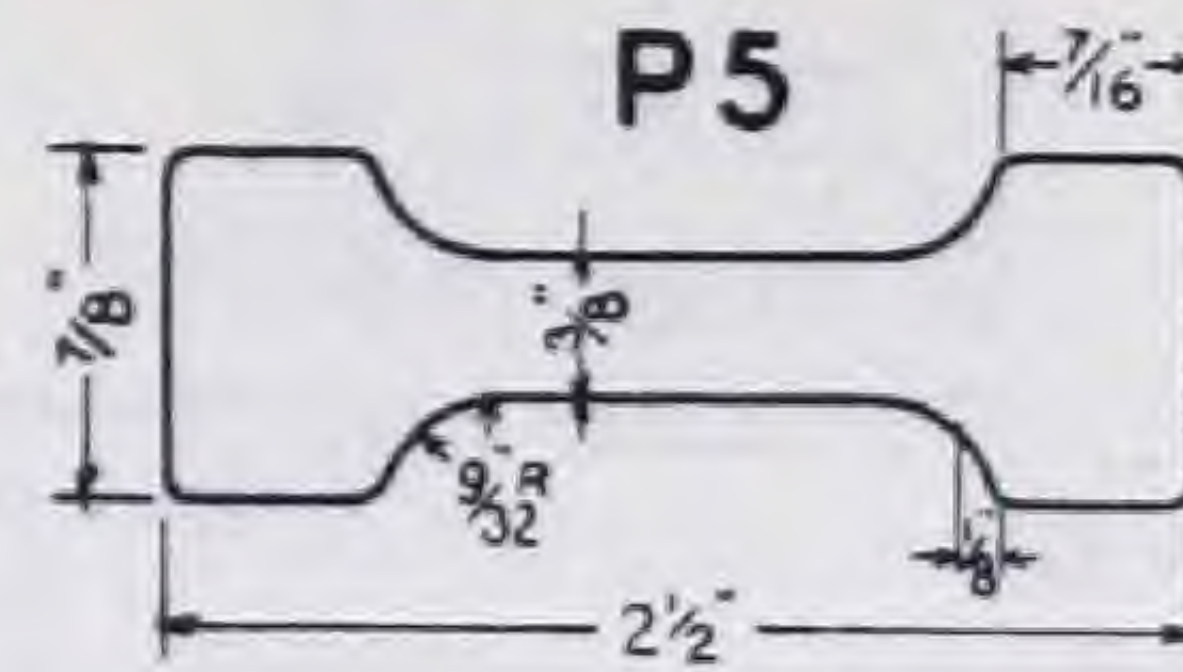
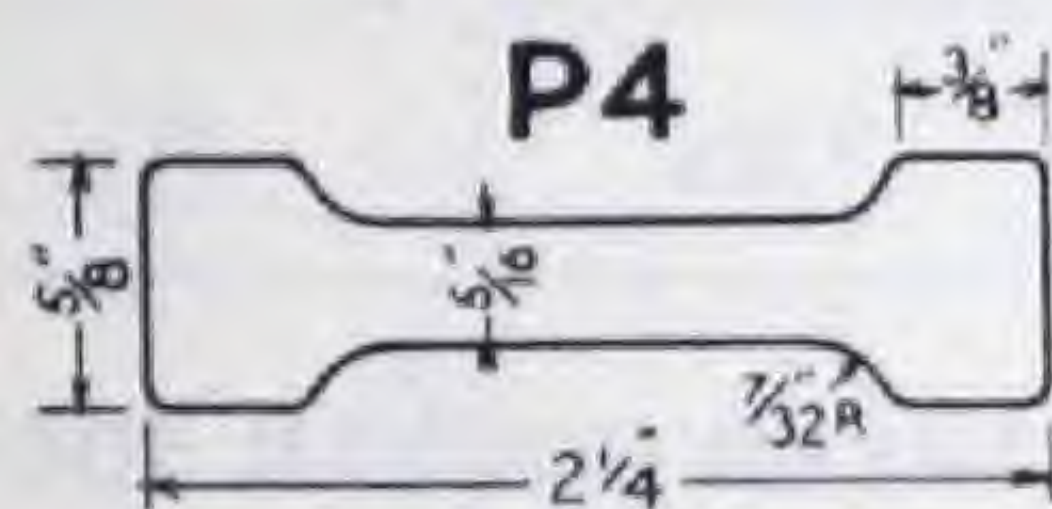
PLOW BEAMS



Note:
This Radius
varies for
each Thickness



Note:
This Radius
varies for
each Thickness



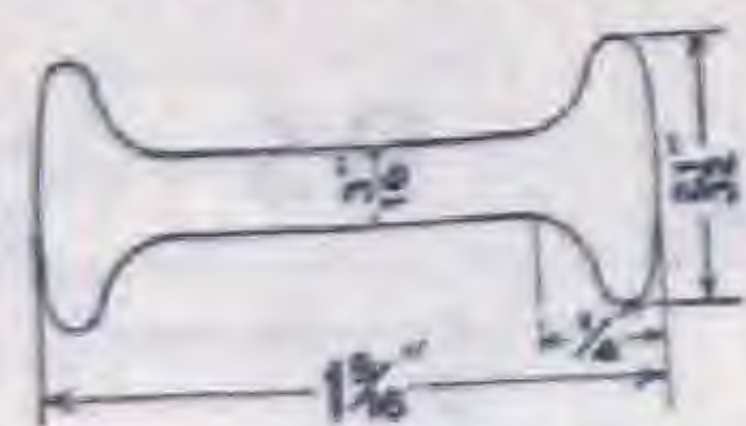
Section No.	Depth, Inches	Width, Inches	Web Thickness, Inches	Weight per foot in Lbs.
P 1	2 3/4	1 1/2	3/8	7.93
	2 3/4	1 5/8	1/2	9.1
	2 3/4	1 3/4	5/8	10.2
	2 3/4	1 7/8	3/4	11.4
	2 3/4	2	7/8	12.5
P 2	2 1/2	1 3/8	3/8	5.95
	2 1/2	1 1/2	5/16	6.875
	2 1/2	1 5/8	7/16	7.80
	2 1/2	1 3/4	9/16	8.86
	2 1/2	2	1 1/16	10.98
P 3	2 3/4	1 5/8	3/8	8.11
	2 3/4	1 3/4	1/2	9.28
	2 3/4	2	3/4	11.62
	2 3/4	2 1/16	1 1/16	12.20
	2 3/4	2 1/8	7/8	12.79
	2 3/4	2 1/4	1	13.96
P 4	2 3/4	2 3/8	1 1/8	15.13
	2 1/4	5/8	5/16	3.28
	2 1/4	3/4	7/16	4.23
	2 1/4	7/8	9/16	5.19

Section No.	Depth, Inches	Width, Inches	Web Thickness, Inches	Weight per foot in Lbs.
P 5	2 1/2	7/8	3/8	4.95
	2 1/2	1	1/2	6.01
	2 1/2	1 1/8	5/8	7.07
	2 1/2	1 1/4	3/4	8.13
P 6	2 1/2	5/8	1 1/32	3.90
	2 1/2	3/4	1 5/32	4.96
	2 1/2	7/8	1 9/32	6.02
P 7	2 3/4	3/4	1 5/32	5.34
	2 3/4	7/8	1 9/32	6.51
	2 3/4	1	2 3/32	7.68
	2 3/4	1 1/8	2 7/32	8.85
P 8	3	1 1/8	1/2	7.35
	3	1 1/4	5/8	8.62
	3	1 3/8	3/4	9.90
	3	1 1/2	7/8	11.18
	3	1 5/8	1	12.45
	3	1 3/4	1 1/8	13.73
P 9	2	3/4	1/4	3.13
	2	7/8	3/8	3.98
	2	1	1/2	4.83

Sizes not listed will be considered

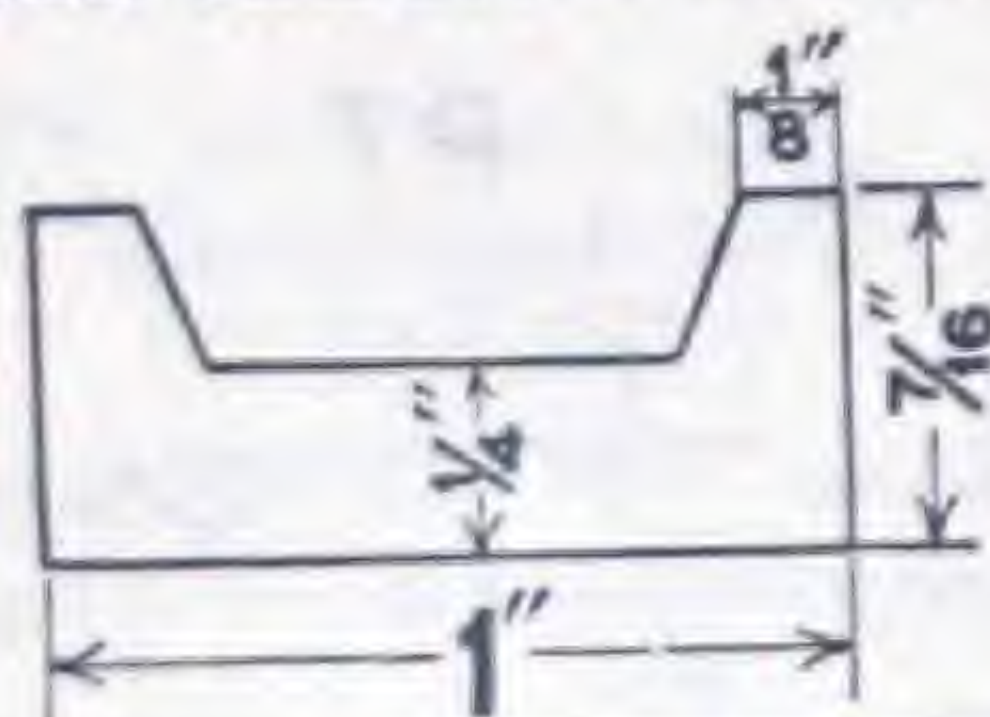
MISCELLANEOUS ROLLED SECTIONS—Cont'd

DOUBLE HARROW CHANNEL



Size, Inches	Weight per Foot in Pounds
$1\frac{9}{16} \times 1\frac{9}{32} \times \frac{5}{32}$	1.40
$1\frac{9}{16} \times \frac{5}{8} \times \frac{3}{16}$	1.57
$1\frac{9}{16} \times 2\frac{1}{32} \times \frac{7}{32}$	1.73

SINGLE HARROW CHANNELS



Depth Inches	Dimension A	Dimension B	Weight per Foot in Pounds
1	$\frac{1}{2}$	$\frac{3}{8}$	1.47
1	$\frac{7}{16}$	$\frac{9}{32}$	1.15
1	$\frac{7}{16}$	$\frac{1}{4}$	1.07



Sharp

DIAMOND



Blunt

Style	Size Inches	Weight per Foot in Pounds
Sharp	$1\frac{7}{32} \times \frac{7}{8}$	1.05
Blunt	$\frac{9}{16} \times \frac{7}{8}$	1.09

HARROW TOOTH STEEL



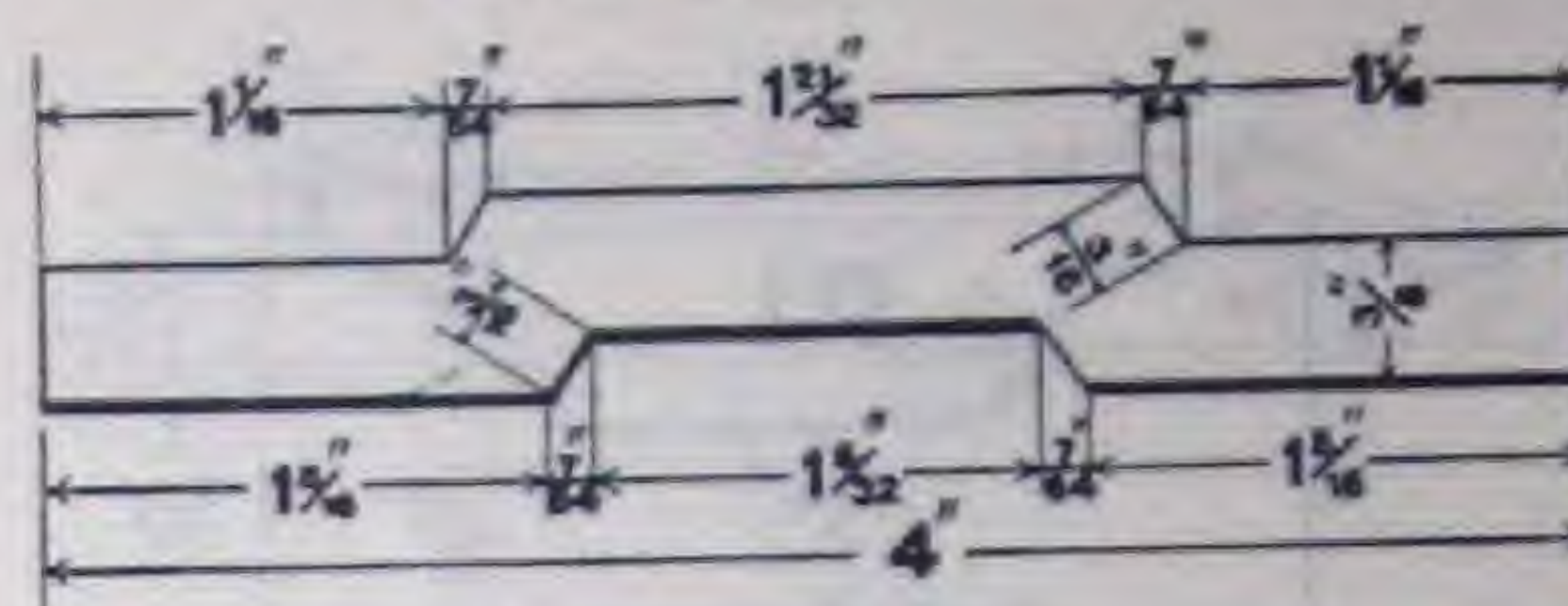
$\frac{1}{2}$ " square to 1" advancing by $\frac{1}{16}$ ths inches
 $1\frac{1}{8}$ " " " $1\frac{1}{4}$ " " " $\frac{1}{4}$ " "

HEXAGONS



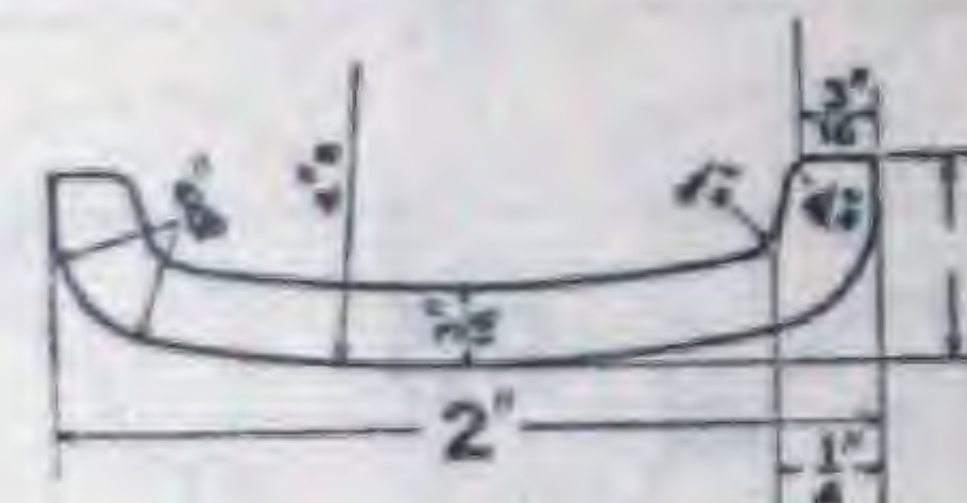
Size in Inches Short Diameter	Weight per Foot in Pounds
$\frac{5}{8}$ "	1.150
$1\frac{3}{16}$ "	1.944
$\frac{7}{8}$ "	2.2544

GROOVED TIRE



Size Inches	Dimension A	Weight per Foot in Pounds
4	$\frac{5}{16}$	4.49
4	$\frac{3}{8}$	5.34
4	$\frac{1}{2}$	7.04
5	$\frac{3}{8}$	7.88

ROUND BACK CHANNELS



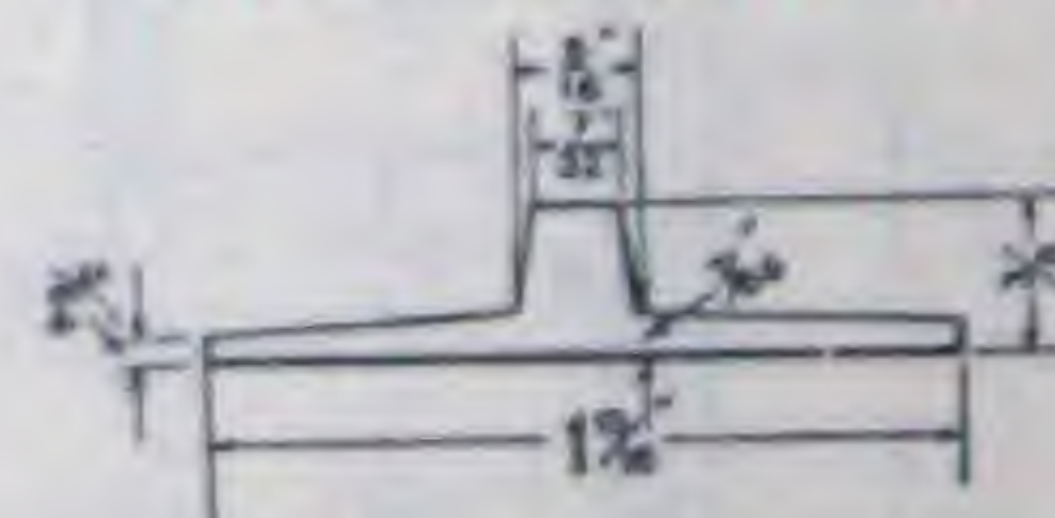
Depth Inches	Flange Width Inches	Webb Thickness Inches	Weight per Foot in Pounds
2	$1\frac{7}{32}$	$\frac{3}{16}$	1.67

BEVELED CORNER SQUARE



Sizes Inches	Bevels Width in Inches	Weight per Foot in Pounds
$1\frac{5}{16} \times 1\frac{5}{16}$	$\frac{5}{32}$	2.910

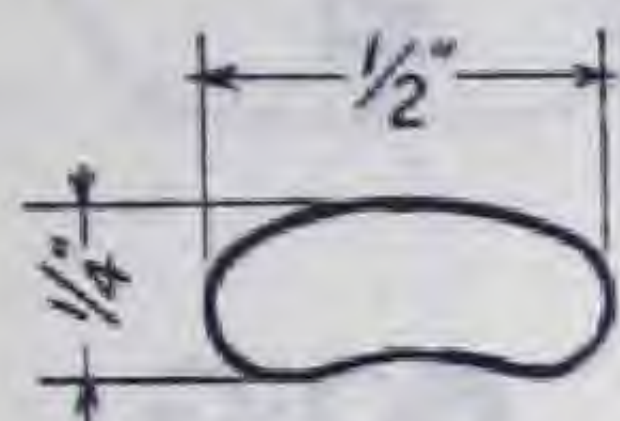
FURNACE BAND



Width Inches	Flange Thickness Inches	Weight per Foot in Pounds
$1\frac{13}{16}$	$\frac{5}{64}$	.75

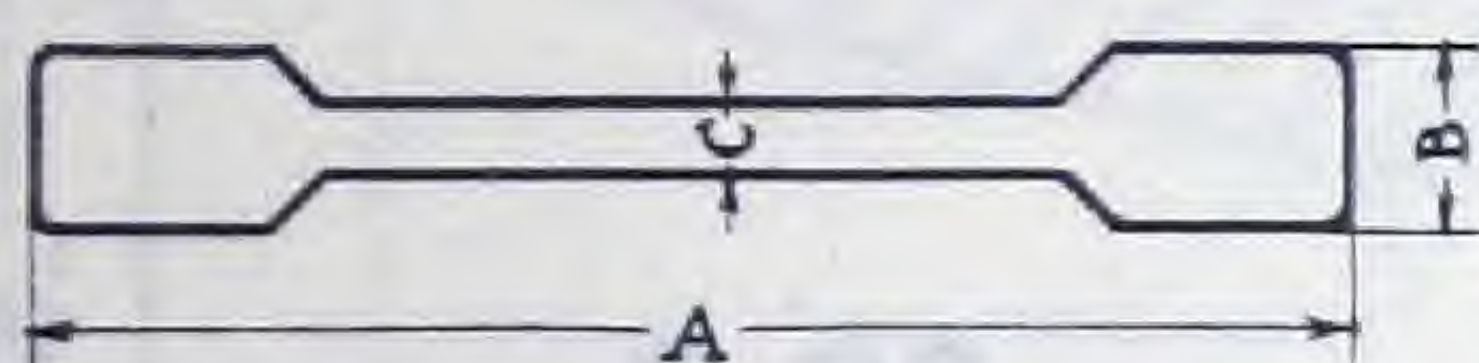
MISCELLANEOUS ROLLED SECTIONS—Cont'd

BUCKET HANDLE



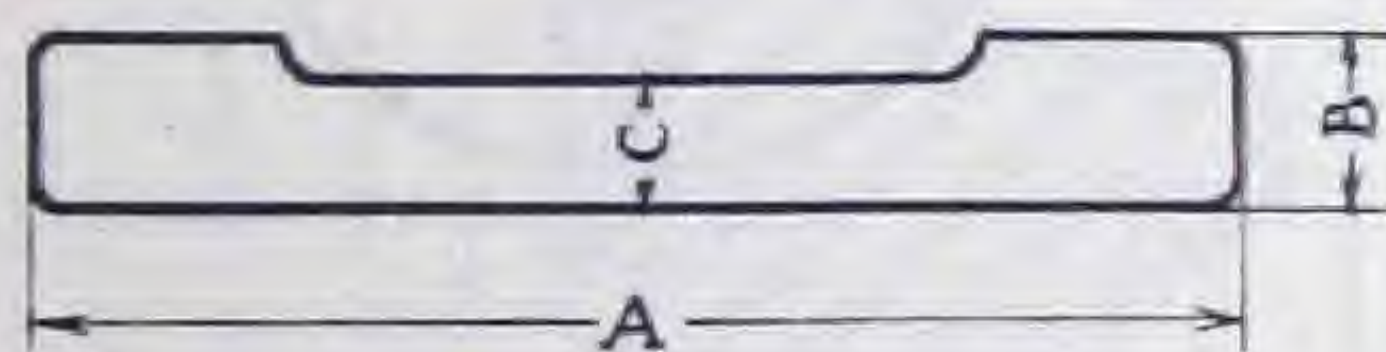
Size in Inches		Weight per Foot in Lbs.
A	B	
$\frac{1}{2}$	$\frac{1}{4}$	.281

BUMPER BAR AND LITTER CARRIER TRACK



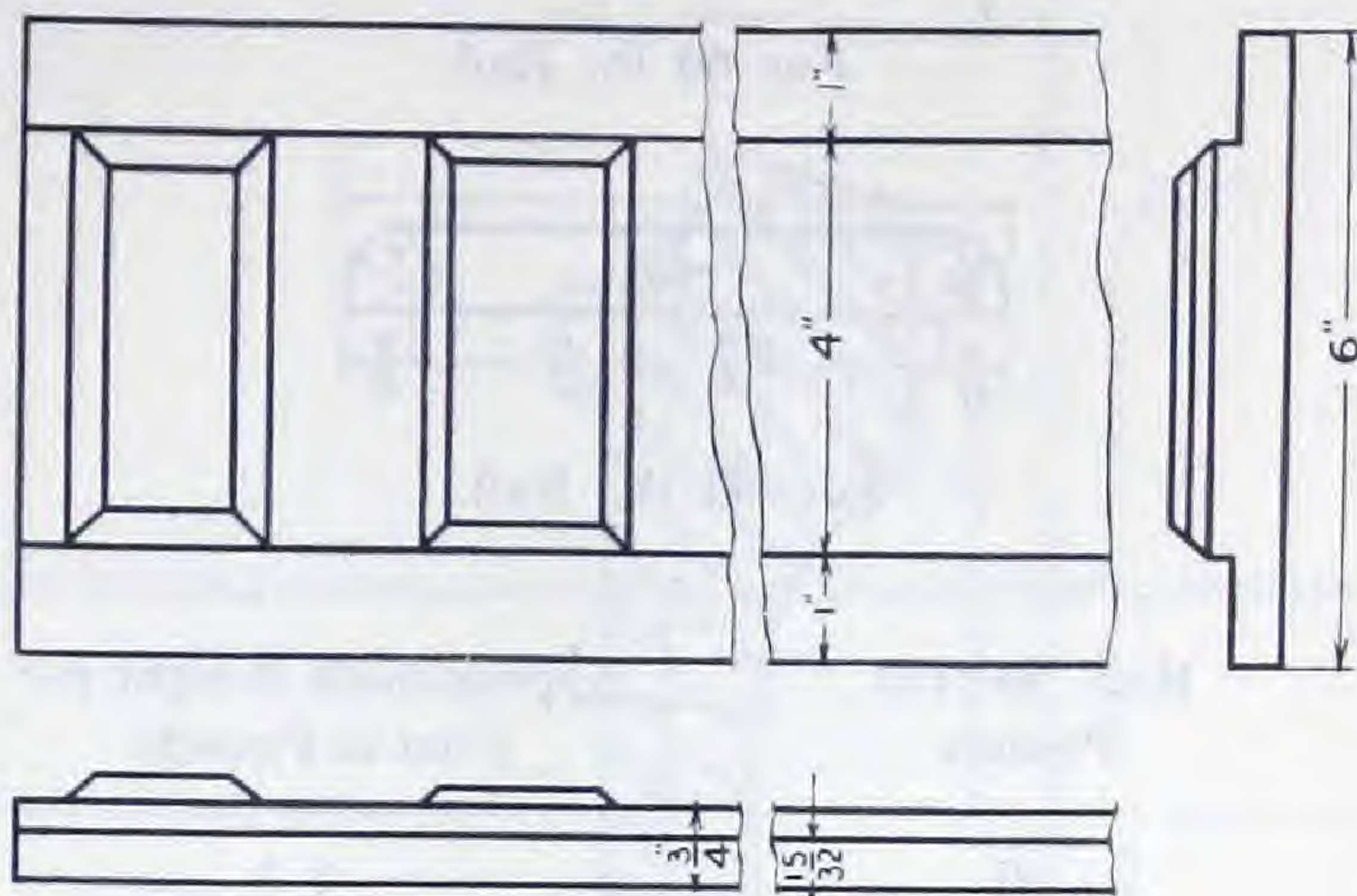
Size in Inches			Weight per Foot in Lbs.
A	B	C	
2	$\frac{3}{8}$	$\frac{5}{32}$	1.70
2	$\frac{1}{2}$	$\frac{9}{32}$	2.55

BUMPER BAR CHANNEL



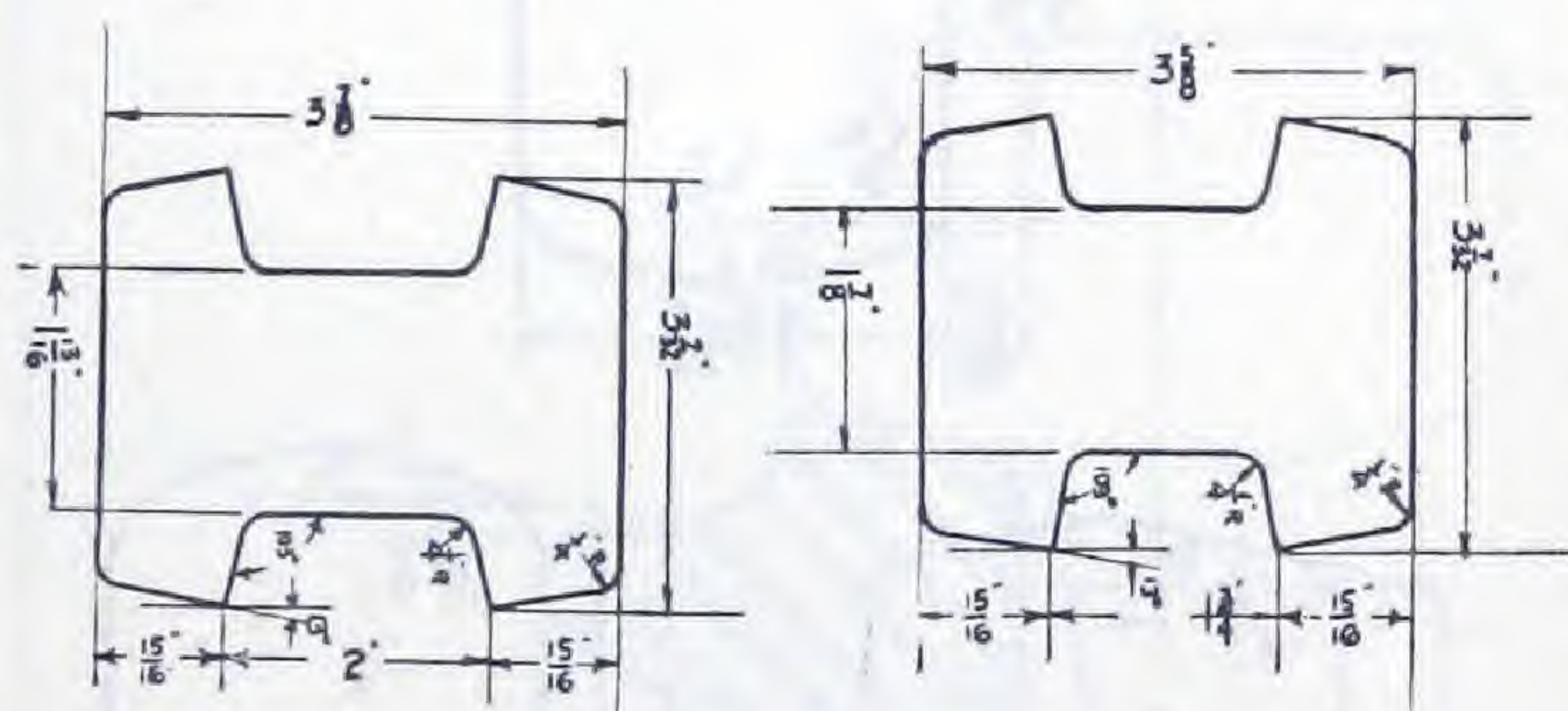
Size in Inches			Weight per Foot in Lbs.
A	B	C	
$1\frac{3}{4}$	$\frac{1}{4}$	$1\frac{1}{64}$	1.213
$1\frac{3}{4}$	$\frac{9}{32}$	$1\frac{3}{64}$	1.416

SWITCH SLIDE BAR



Size in Inches	Weight per Foot in Lbs.
6	14.2

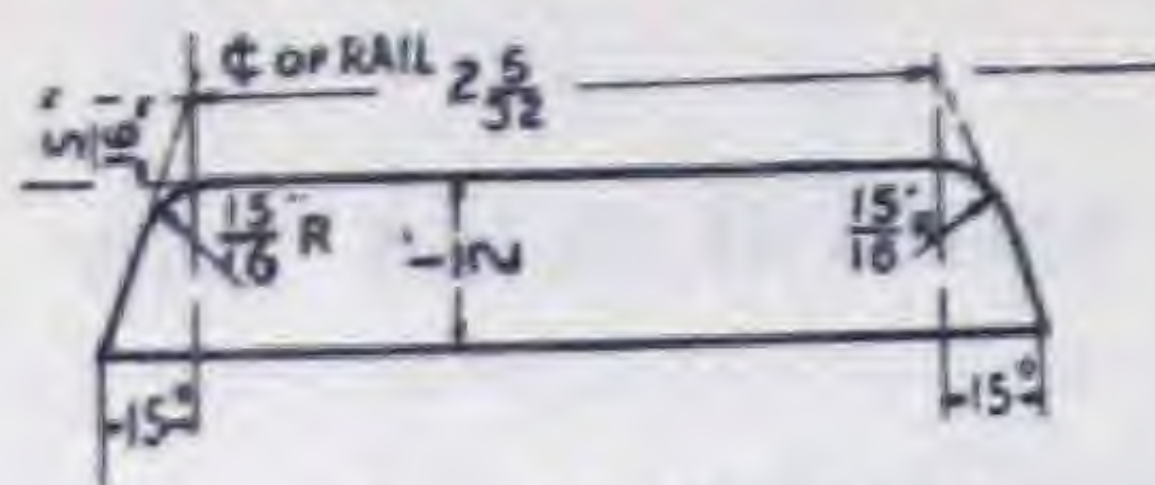
FROG FILLERS



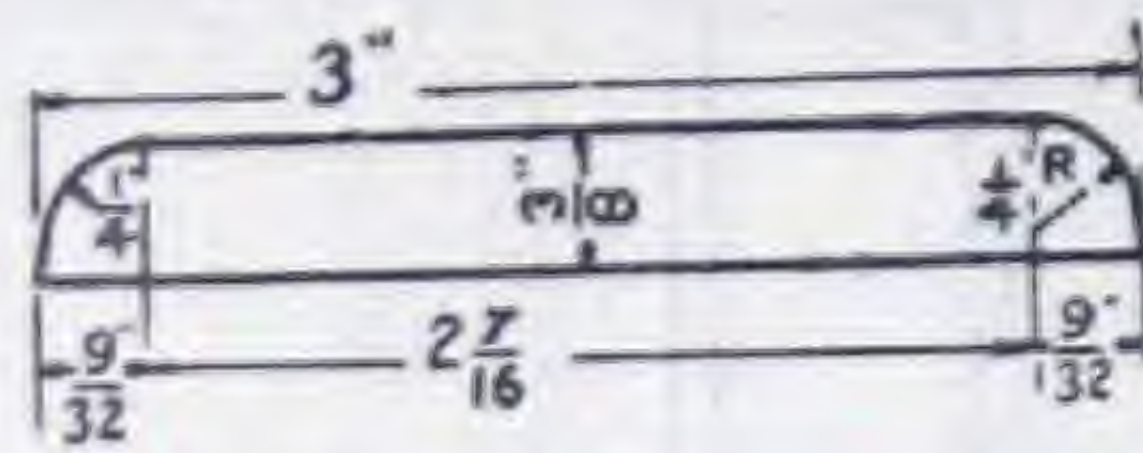
Rail Section Pounds	Inches	Approx. Weight per Foot in Lbs.
80	$1\frac{3}{4}$	31.3
80	2	33.0

MISCELLANEOUS ROLLED SECTIONS—Cont'd

WEB REINFORCE



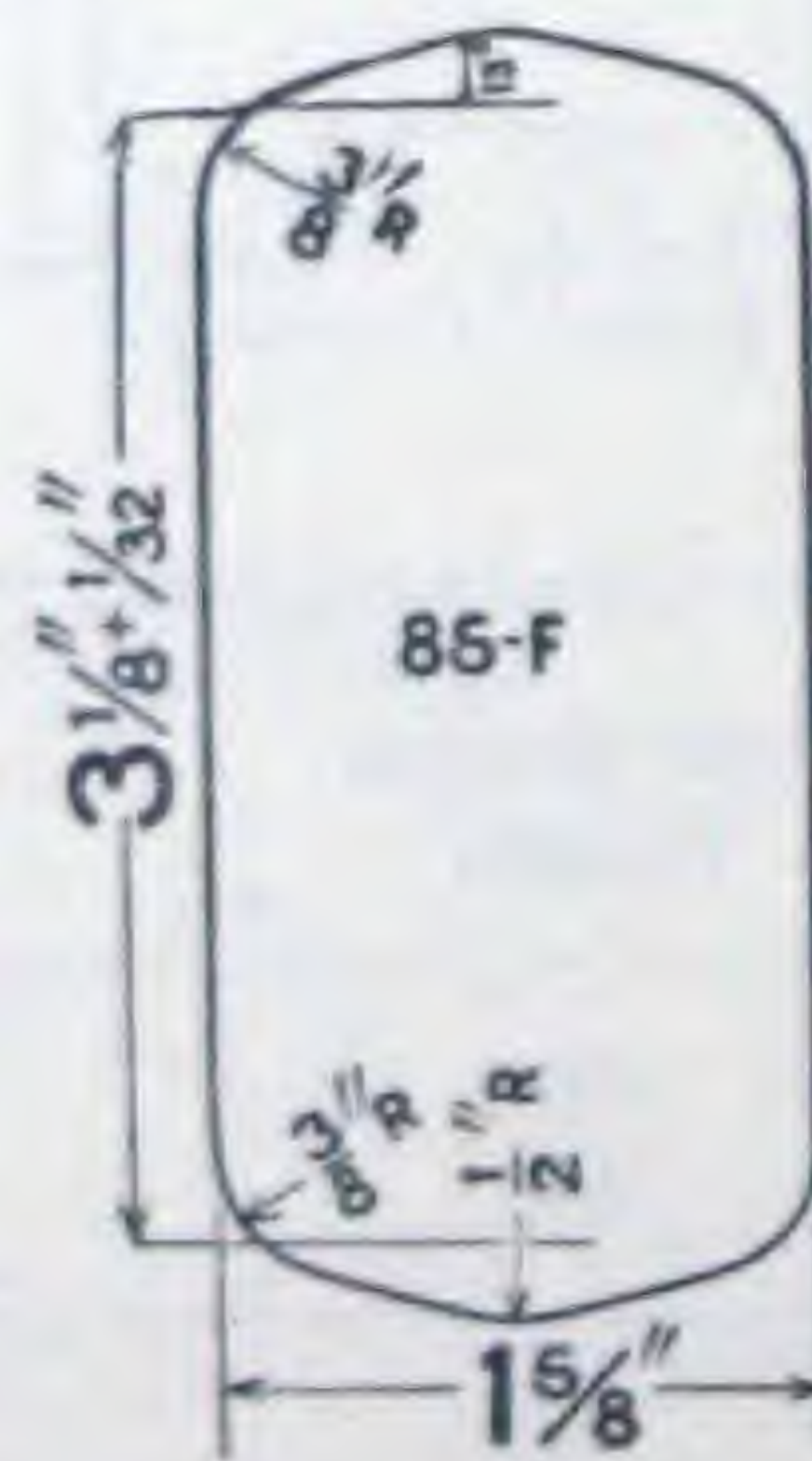
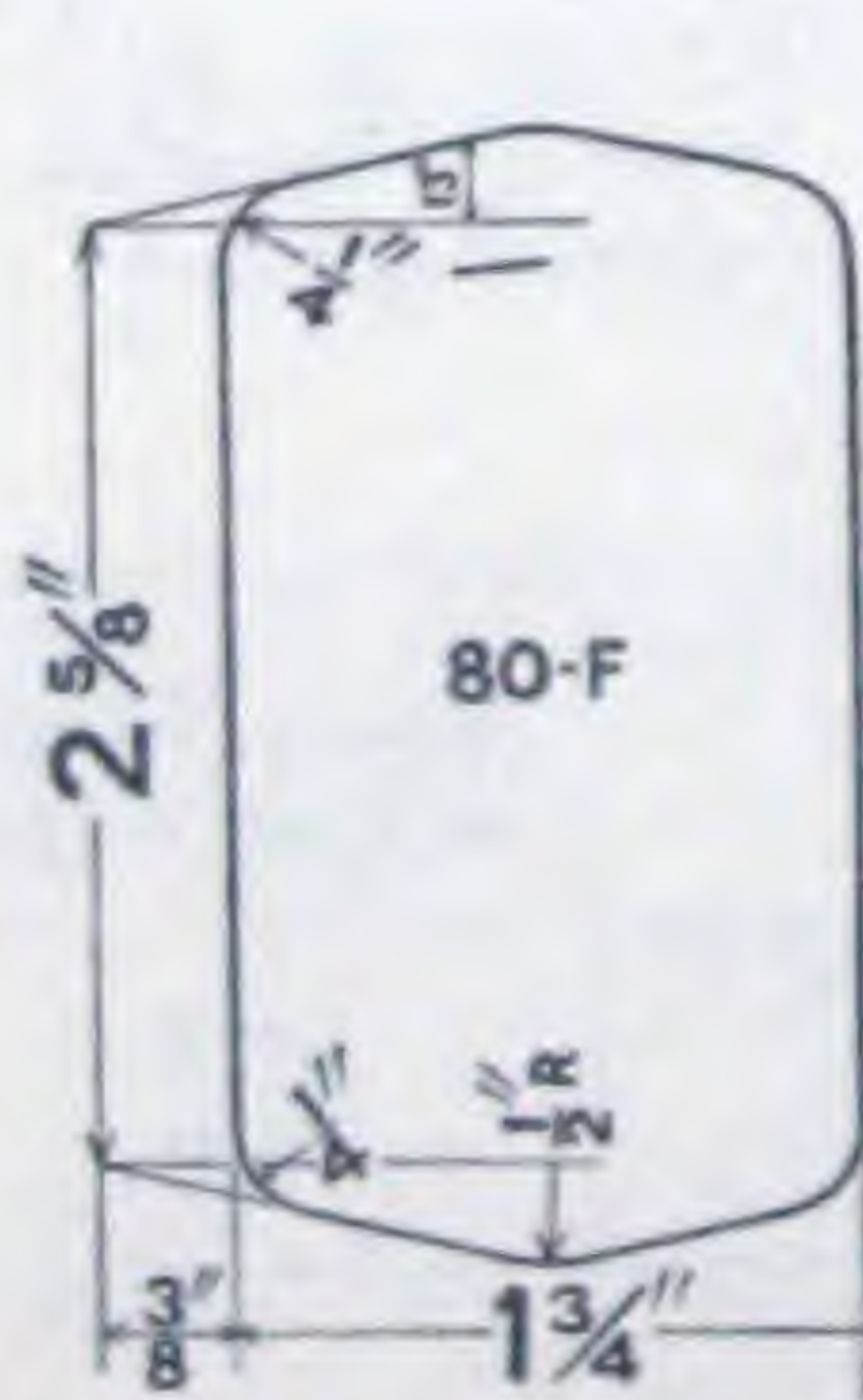
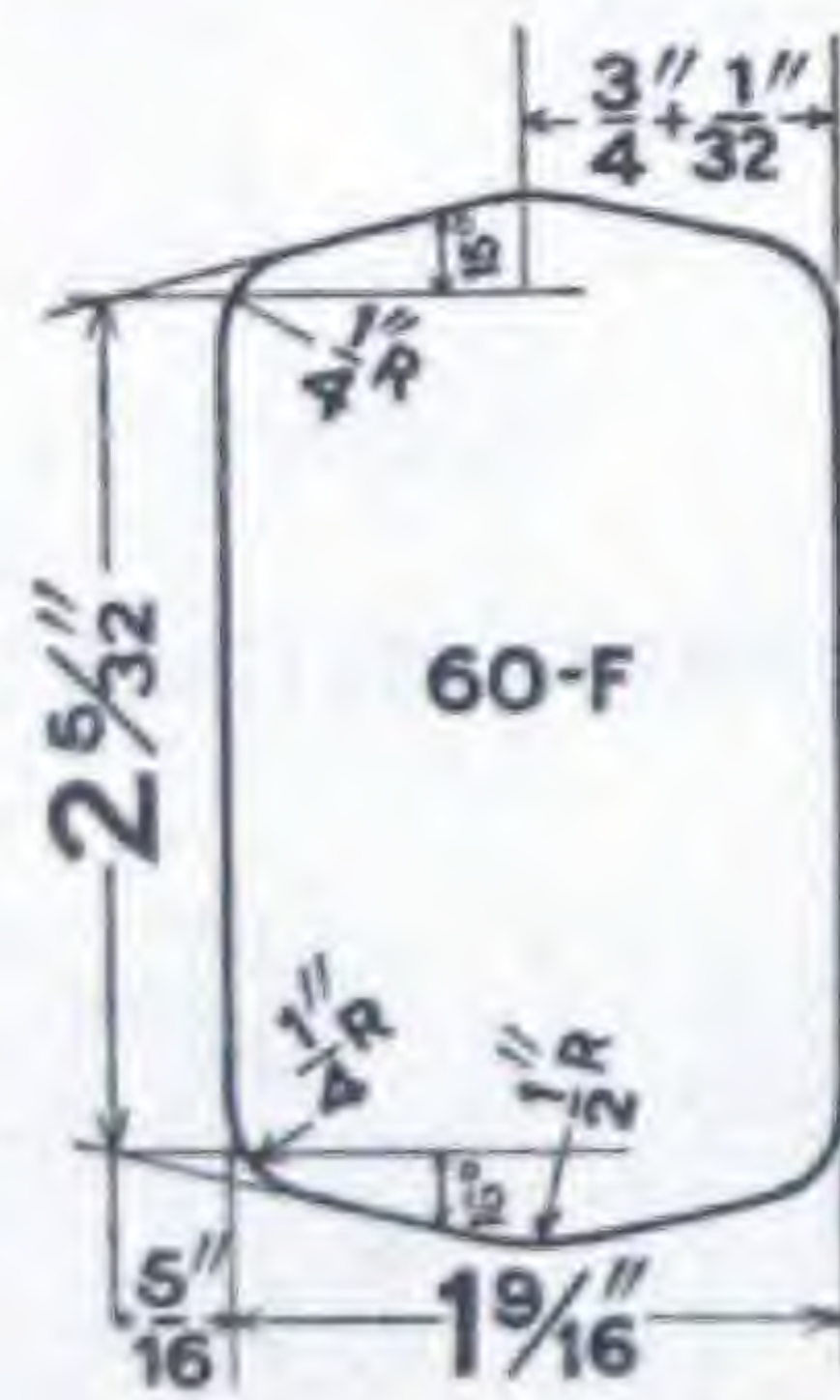
For 60 lb. Rail



For 80 lb. Rail

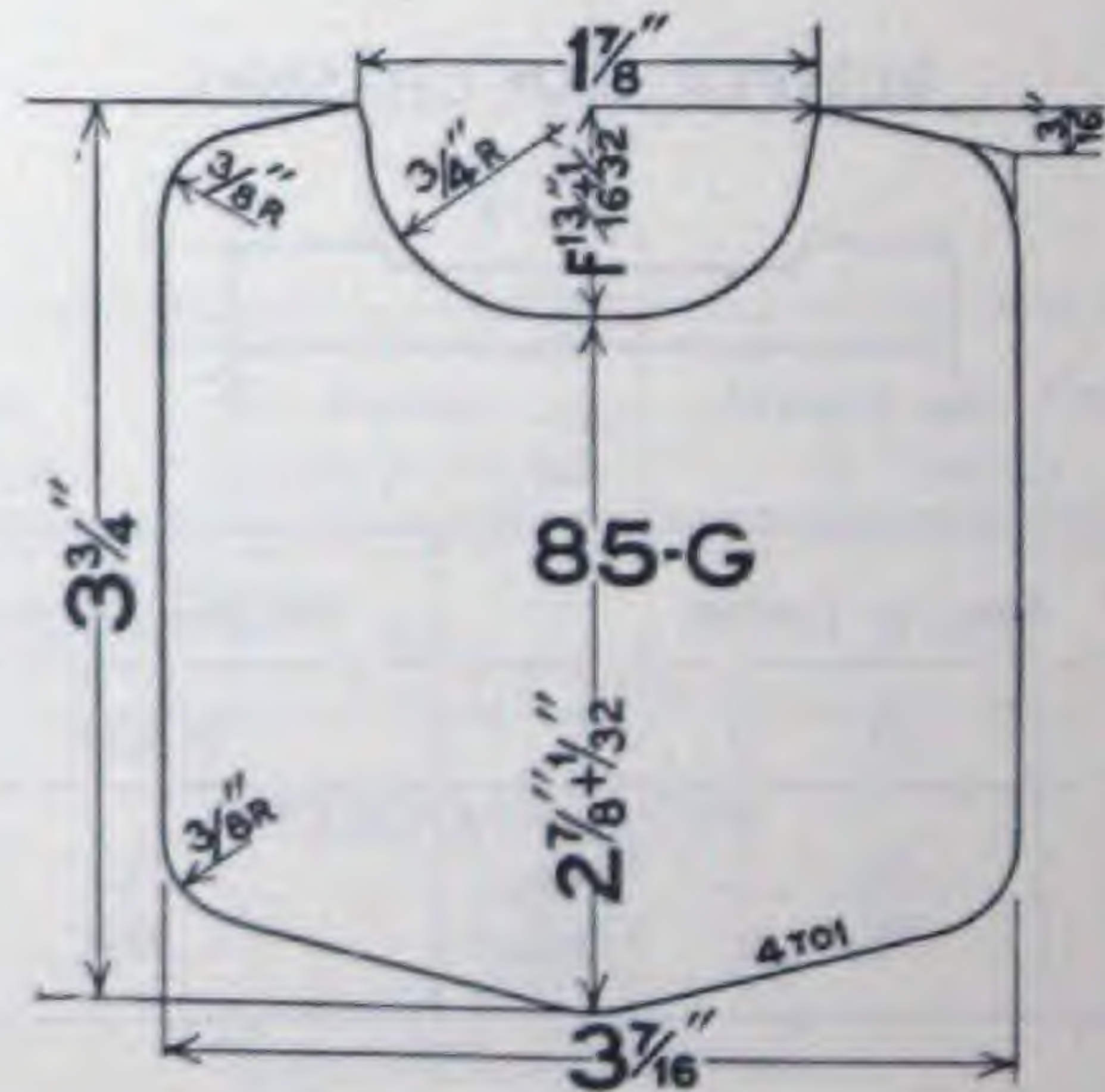
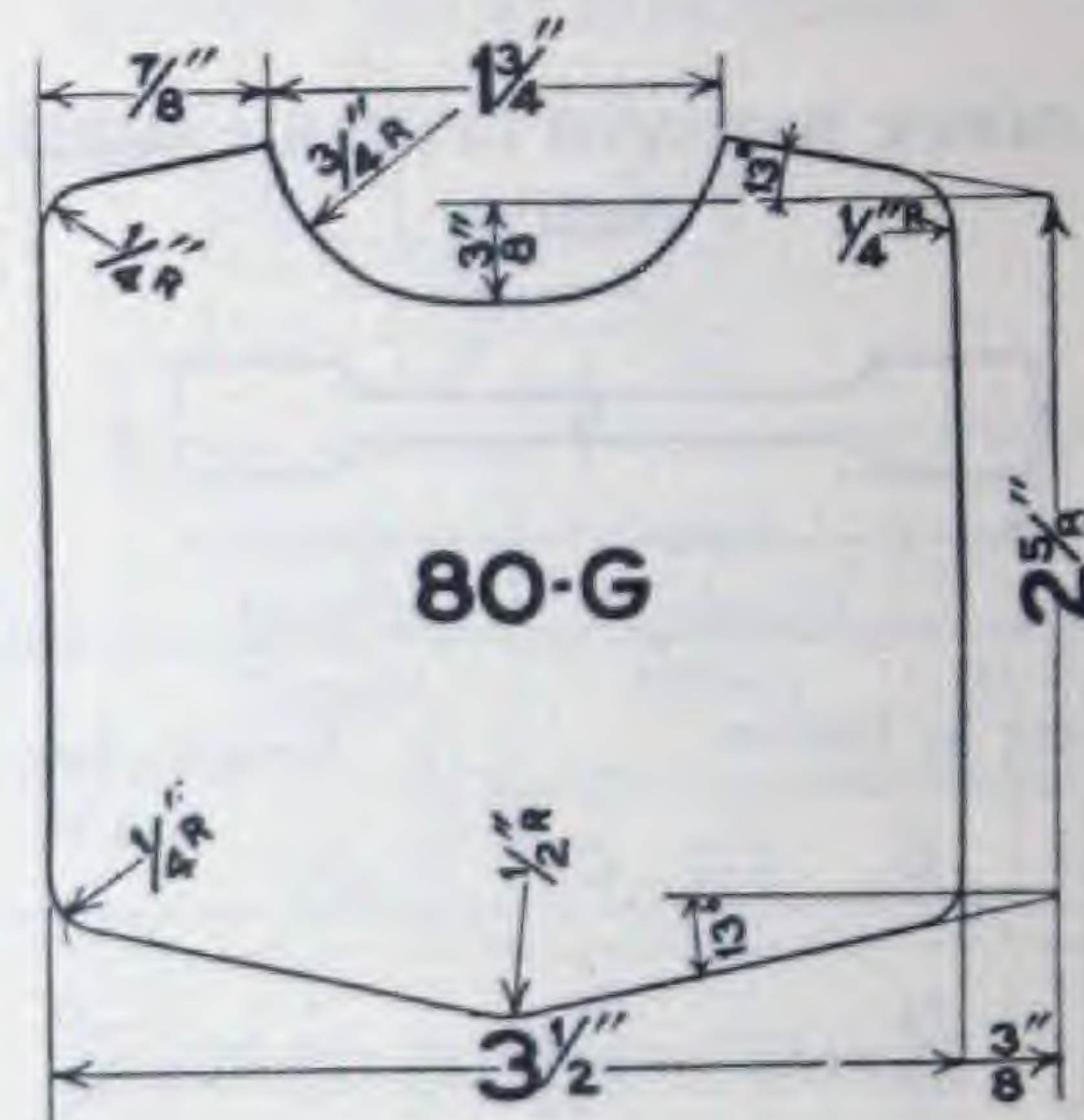
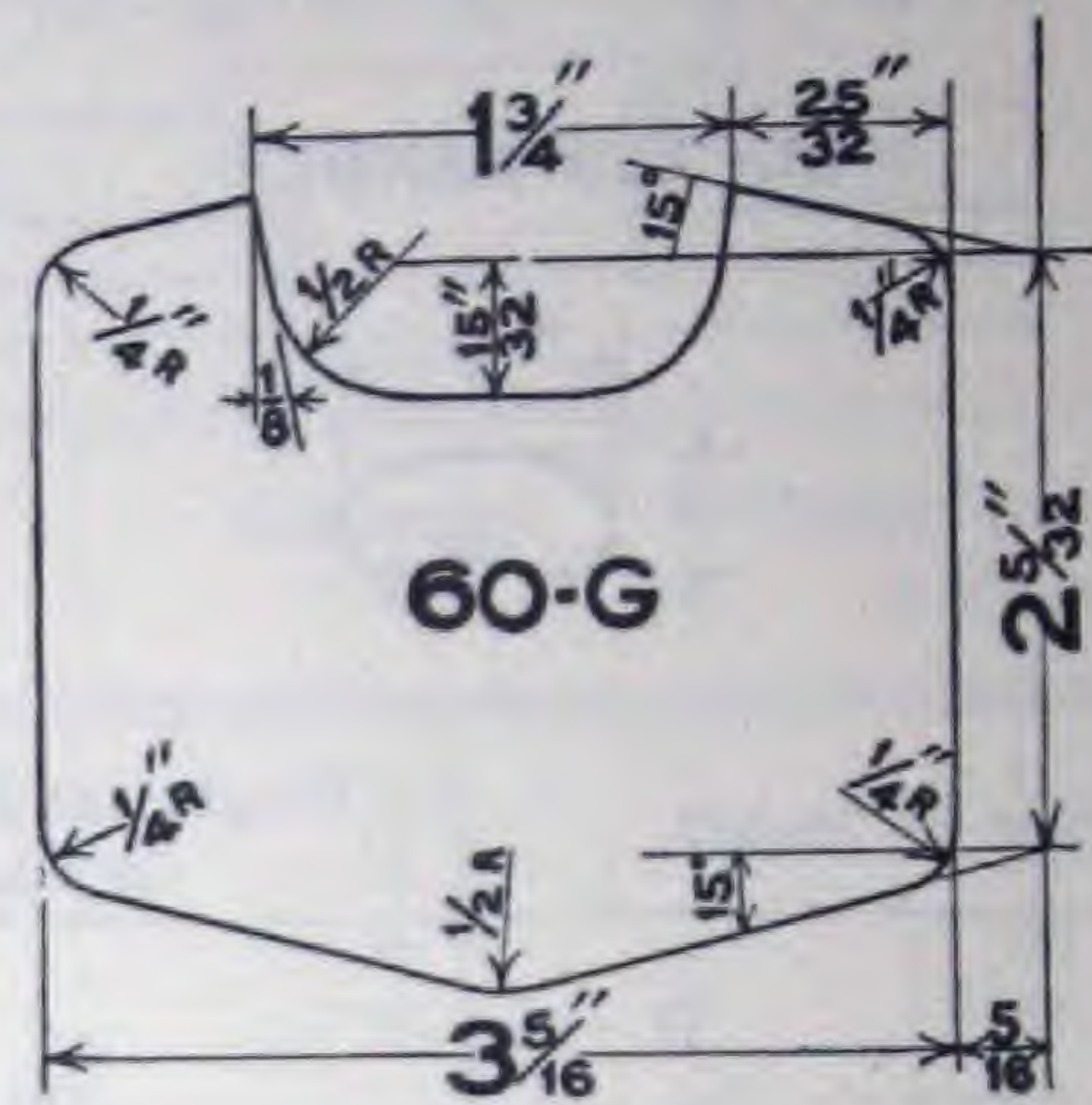
Rail Section Pounds	Approximate Weight per Foot in Pounds
60	4.1
80	3.7

REINFORCE RAIL FILLERS



Rail Section in Pounds	Approximate Weight per Foot in Pounds
85	18.17
80	17.85
56 and 60	13.44

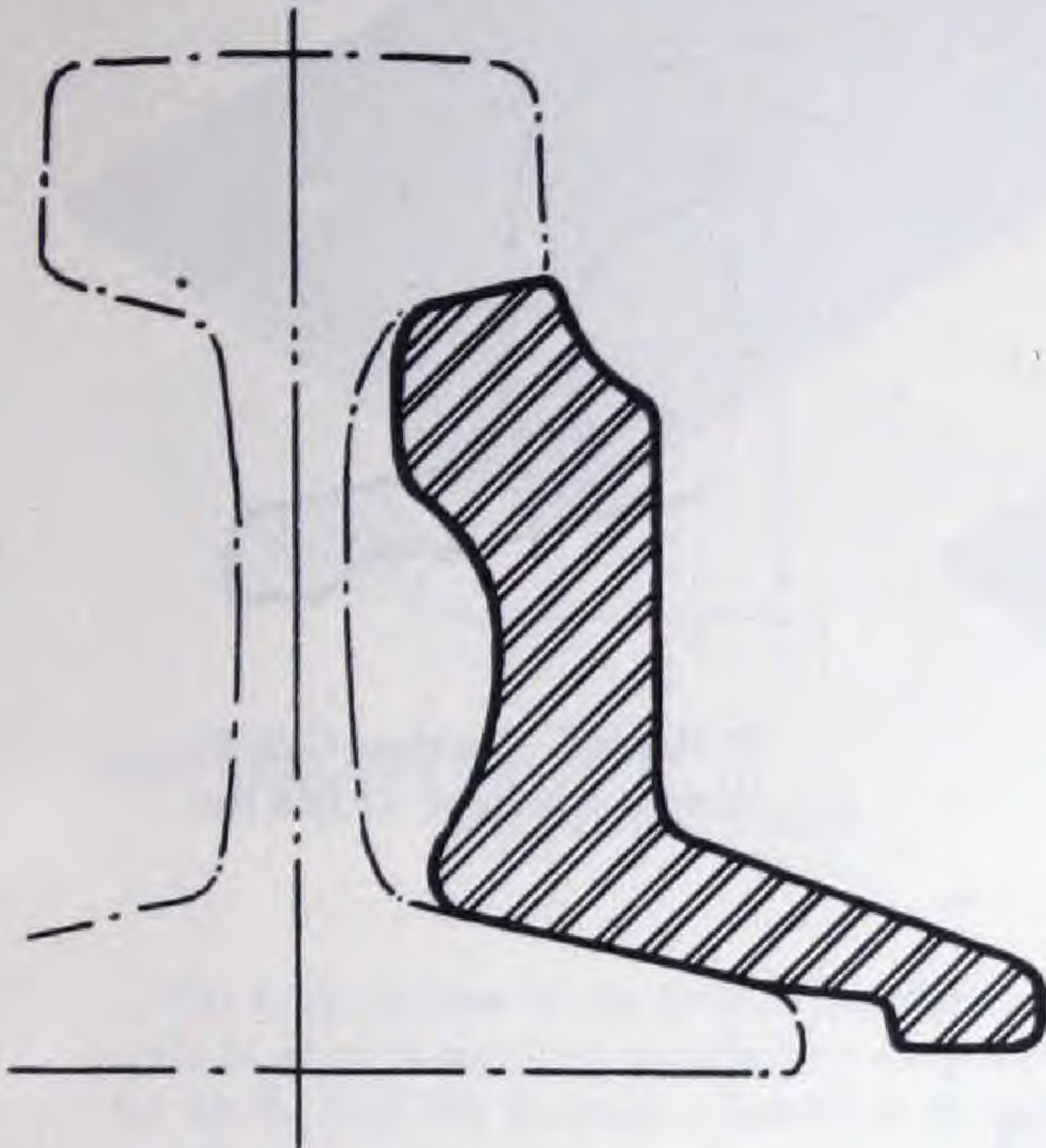
GUARD RAIL FILLERS



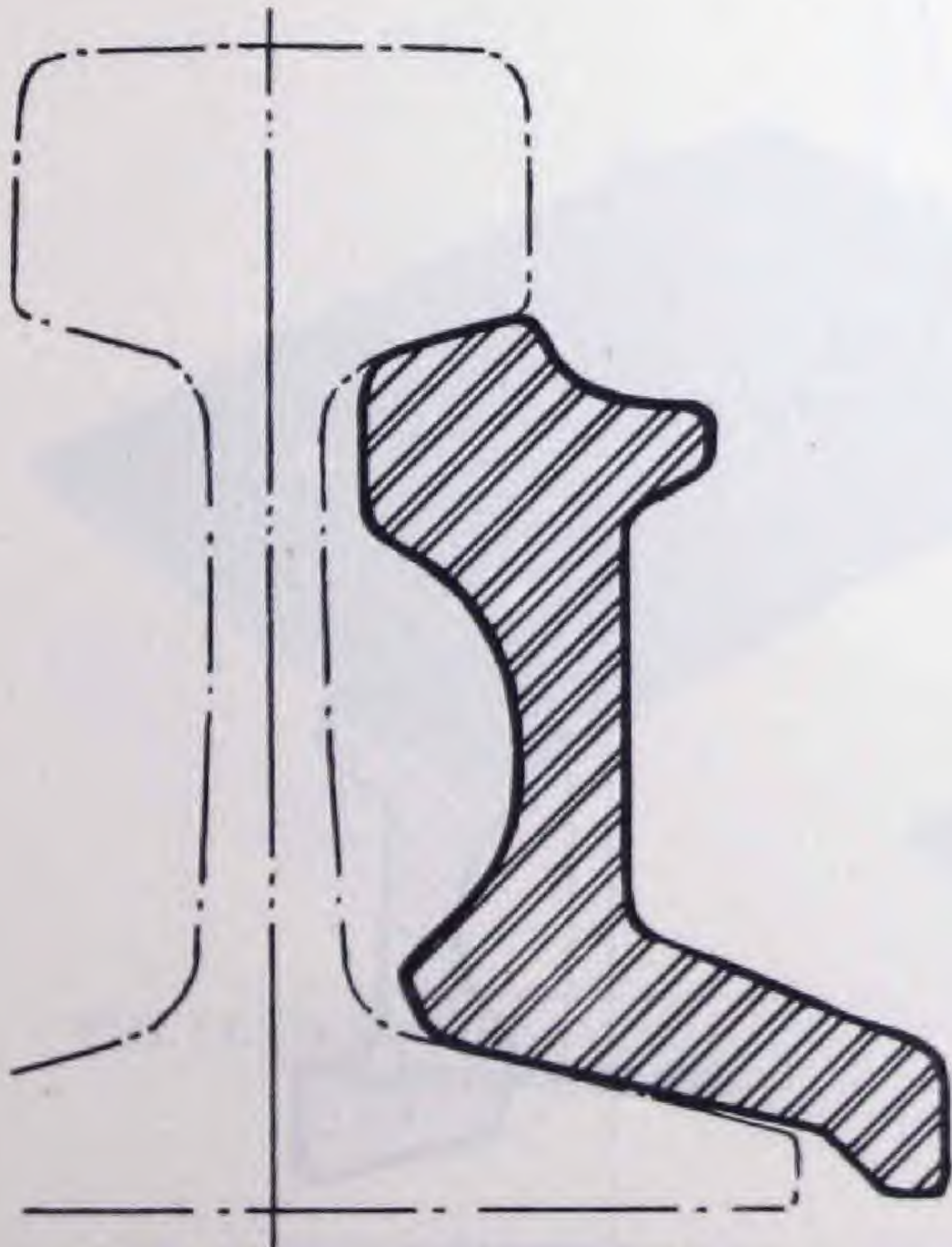
Rail Section in Pounds	Approximate Weight per Foot in Pounds
85	36.12
80	34.9
56 and 60	26.2

MISCELLANEOUS ROLLED SECTIONS—*Cont'd*

ANGLE SPLICE BARS



85 lb. 40D. C.P.R. Section.
Weight per Foot, 13.45 lbs.

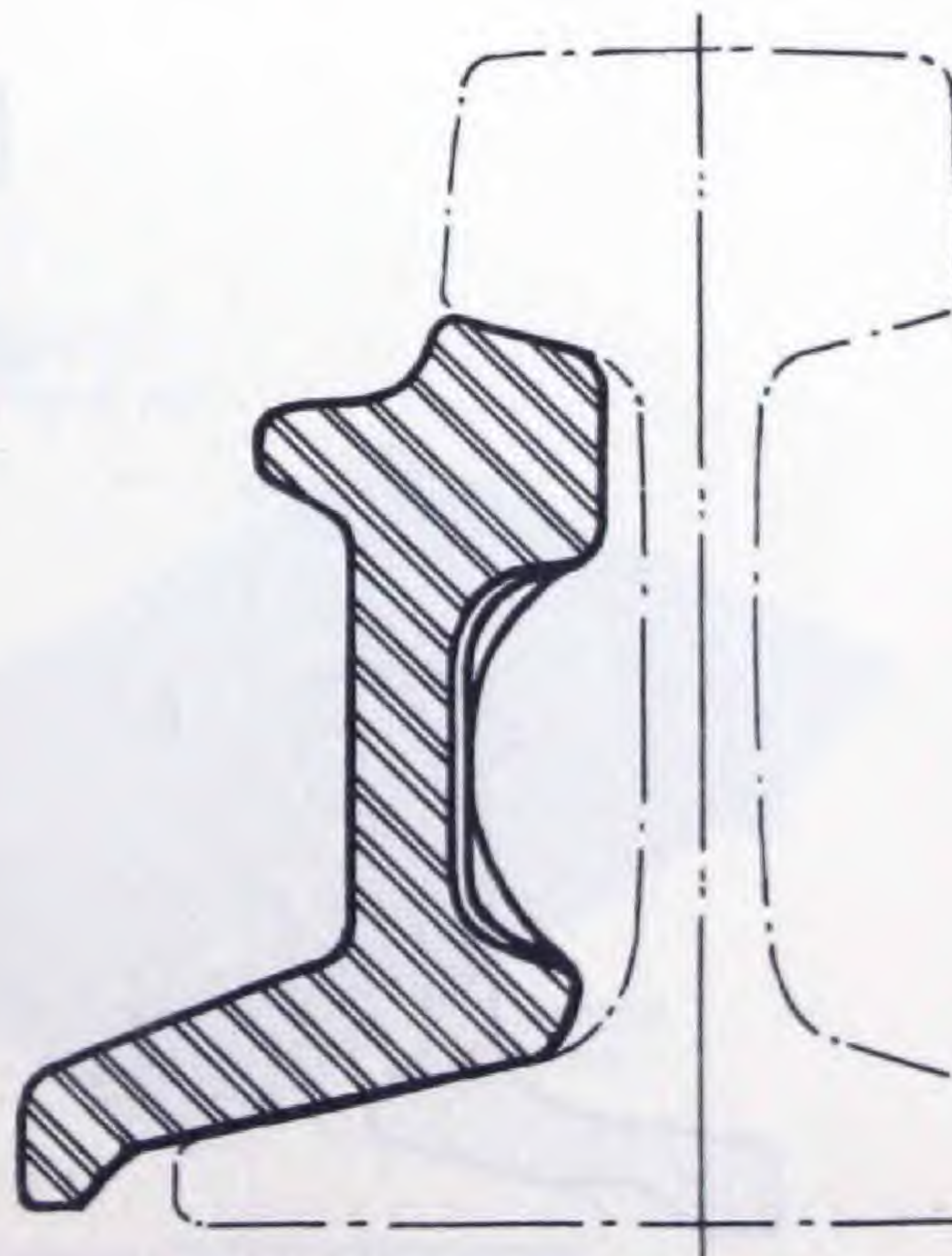


100 lb. R.E.—1 Plain Section C.P.R.
Weight per Foot, 16.35 lbs.

ANGLE SPLICE BARS



100 lb. A.R.A.A. Standard Section C.N.R.
Weight per Foot, 16.1625 lbs.



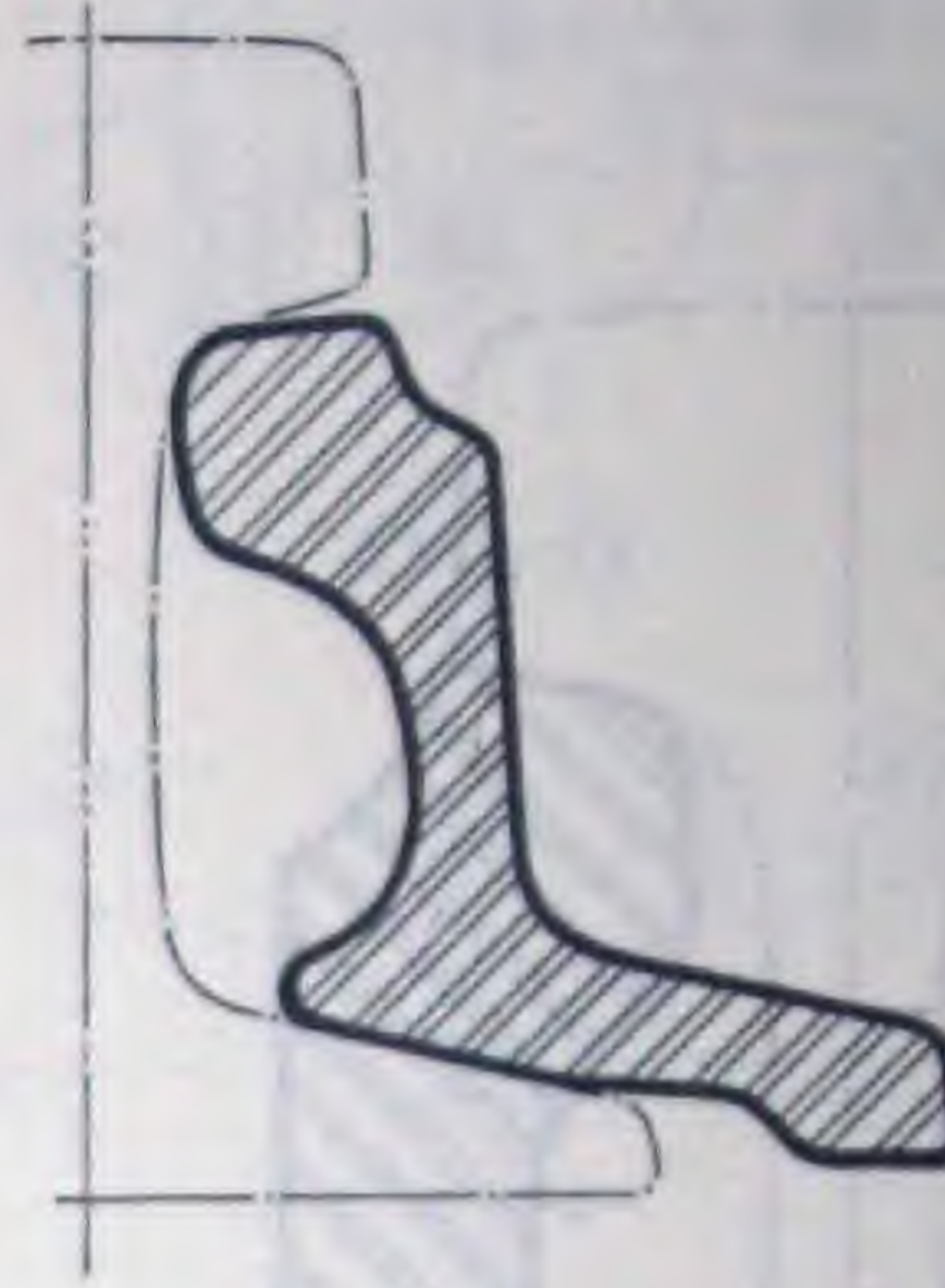
100 lb. R.E.—1 Corrugated Section C.P.R.
Weight per Foot, 16.04 lbs.

MISCELLANEOUS ROLLED SECTIONS—*Cont'd*

ANGLE SPLICE BARS



79 lb. F.W. Section C.N.R.
Weight per Foot, 10.875 lbs.



85 lb. H.F. Section C.N.R.
Weight per Foot, 13.068 lbs.



130 lb. H.F. Section C.P.R.
Net weight of 22" Bar 37.11 lbs.



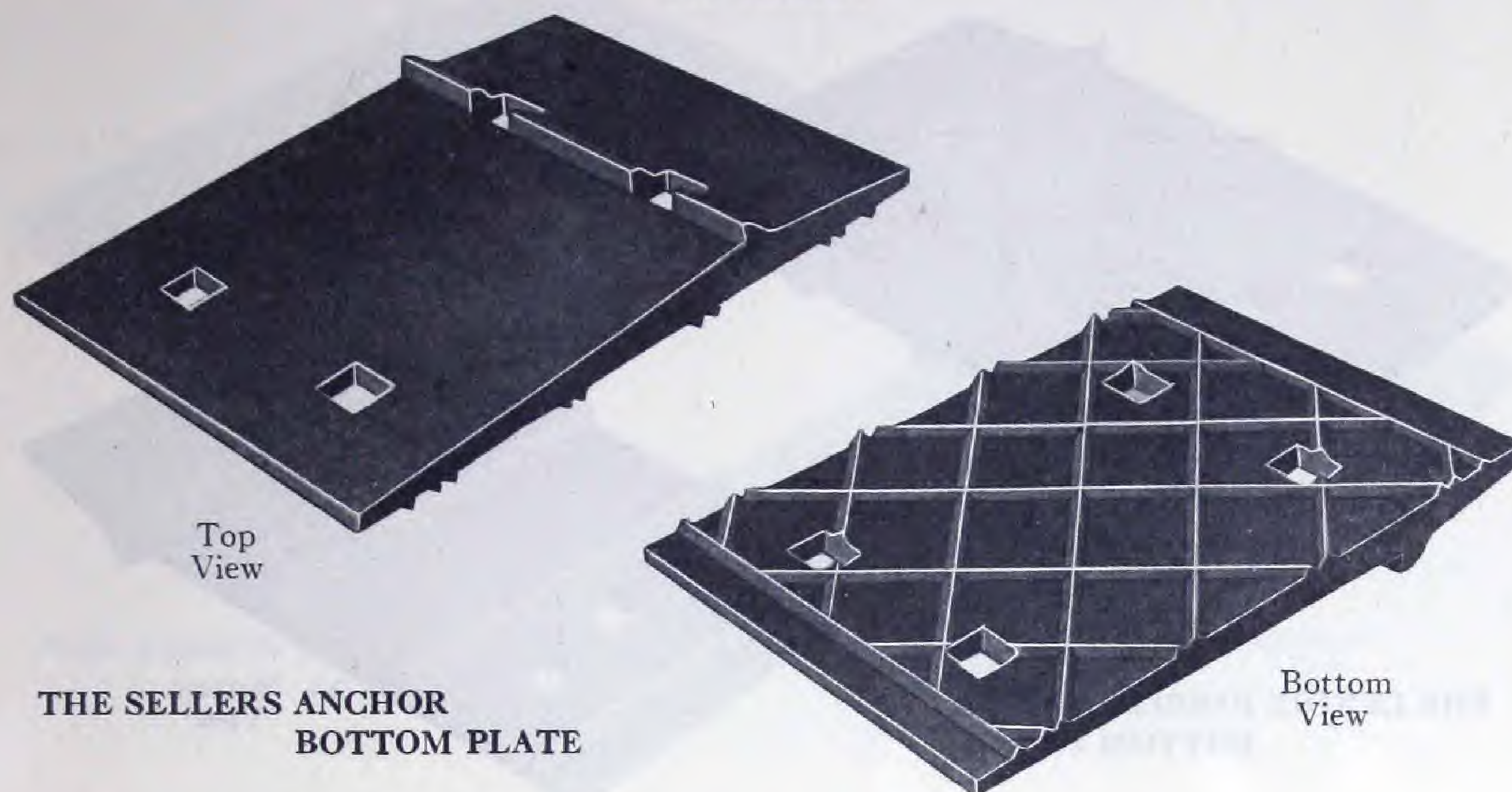
100 lb. H.F. Section C.N.R.
Weight per Foot, 16.956 lbs.



130 lb. H.F. Section C.N.R.
Net weight of 22" Bar 37.11 lbs.

MISCELLANEOUS ROLLED SECTIONS—*Cont'd*

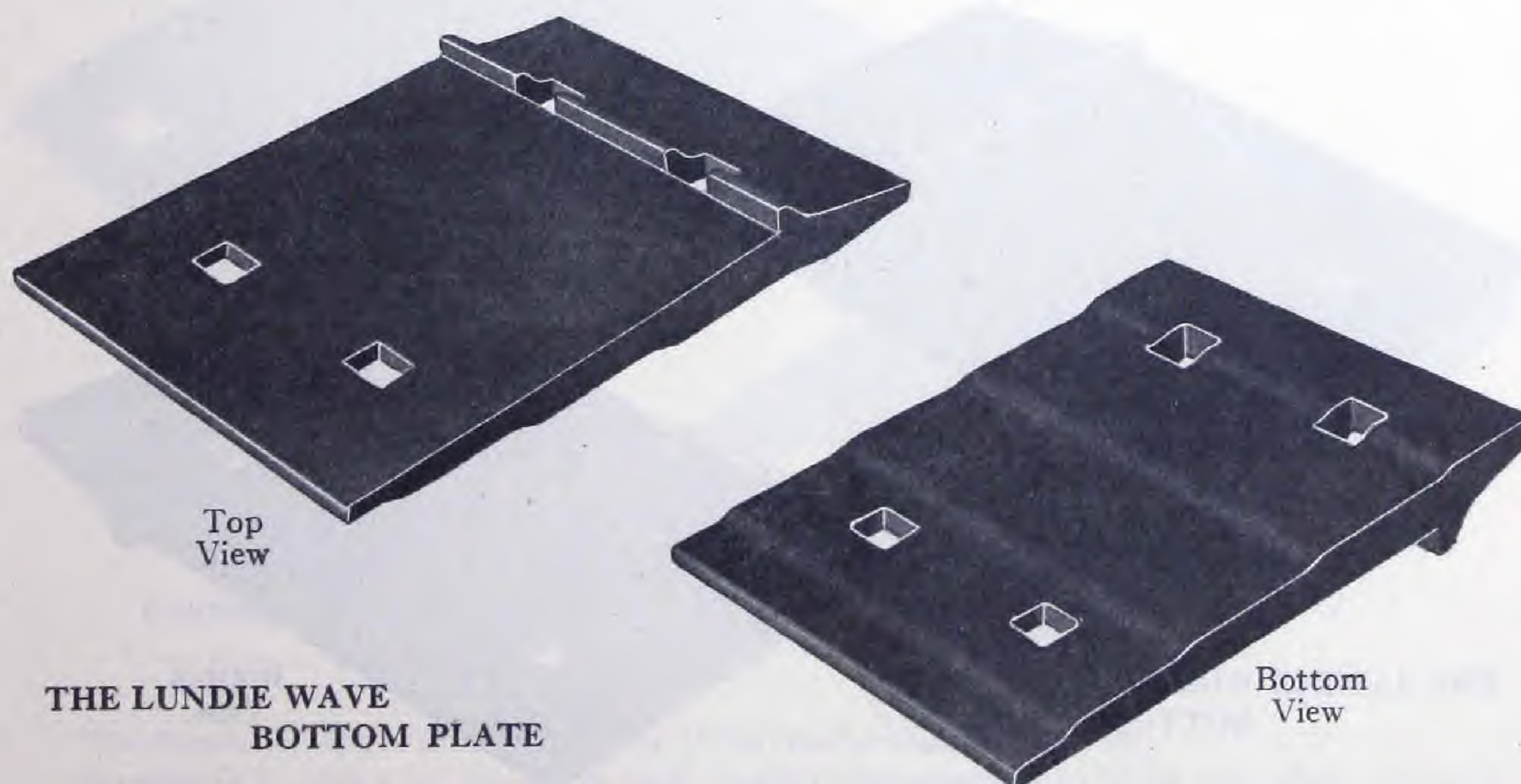
TIE PLATES



**THE SELLERS ANCHOR
BOTTOM PLATE**

The bottom view of the Sellers Tie Plate very distinctly illustrates the rolling of the ribs. This style of plate is supplied punched to specification in 6", 6½" and 7" widths x 10" long. Suitable for 85 lb. and 100 lb. rails. Rolled in weights 17.26 lbs. per foot and 21.72 lbs. per foot before punching.

This style of plate is supplied 6½" wide x 10½" for 85 lb. rails—weighs approximately 8.70 lbs. per plate punched as illustrated. This plate can be rolled also in heavier or lighter weights, in various widths and punched to specification.



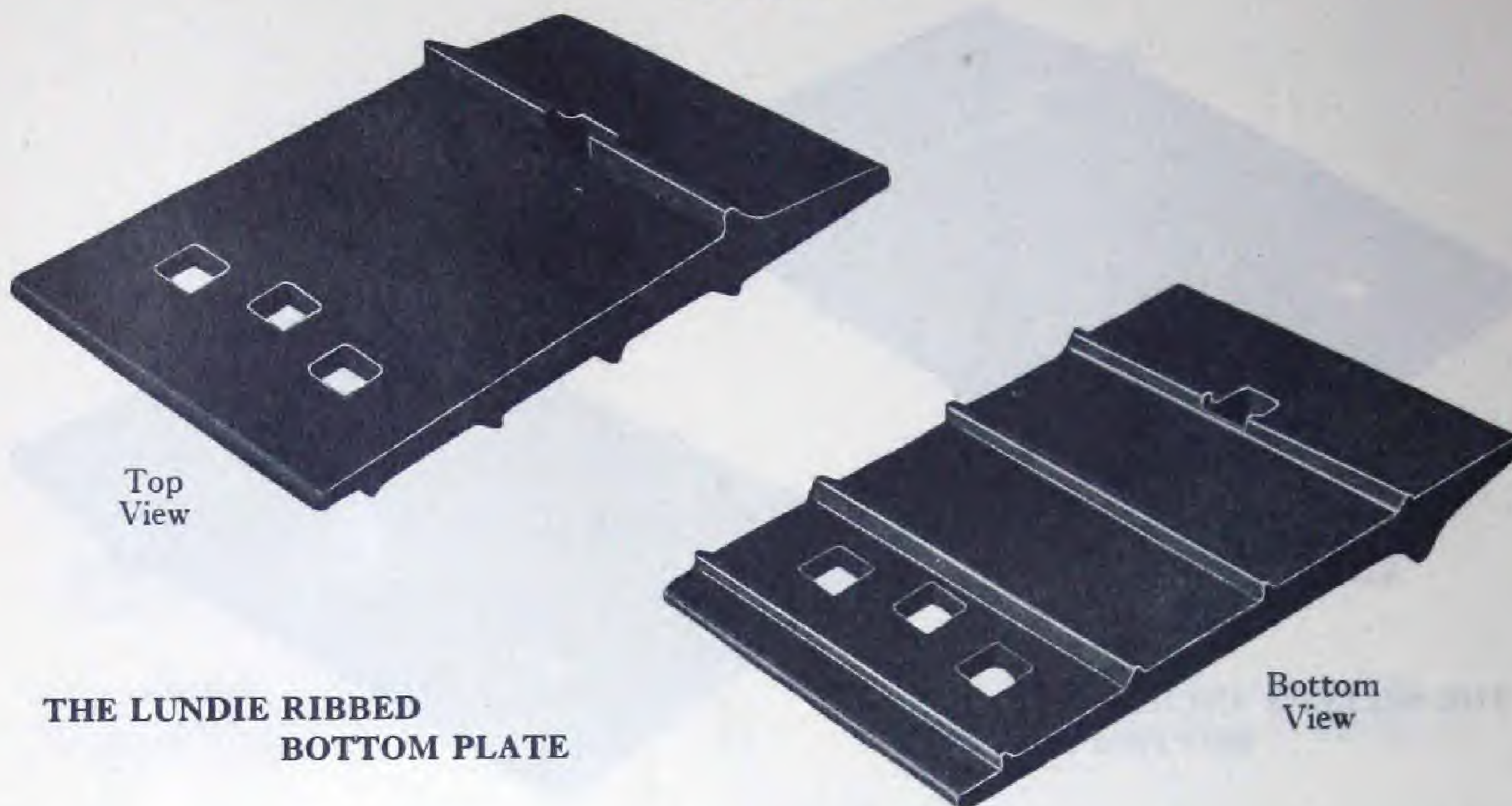
**THE LUNDIE WAVE
BOTTOM PLATE**

The illustration above shows the special rolling of the waves for this style of plate.

Supplied 6½" wide x 8½" for 60 lb. rails—weighs approximately 7.6 lbs. per plate punched as illustrated. This plate can be rolled also in heavier or lighter weights, in various widths and punched to specification.

MISCELLANEOUS ROLLED SECTIONS—*Cont'd*

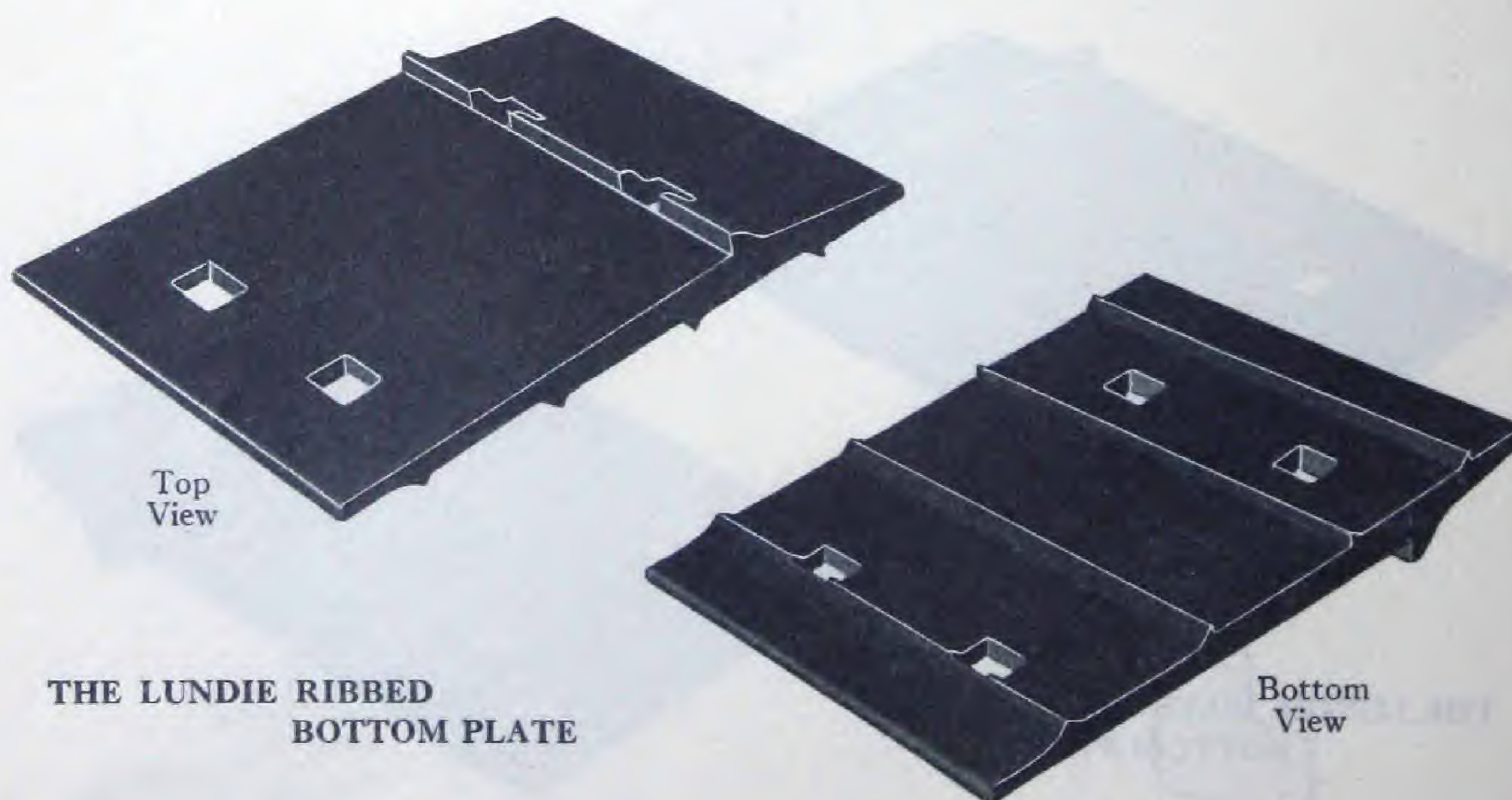
TIE PLATES



THE LUNDIE RIBBED
BOTTOM PLATE

The Lundie Ribbed Bottom Plate as illustrated above showing the rolling of the ribs for this section.

This style of plate is supplied 7" wide x 10½" for 100 lb. rails—weighs approximately 11.3 lbs. per plate, punched as illustrated. Can be rolled also in heavier or lighter weights, in various widths and punched to specification.



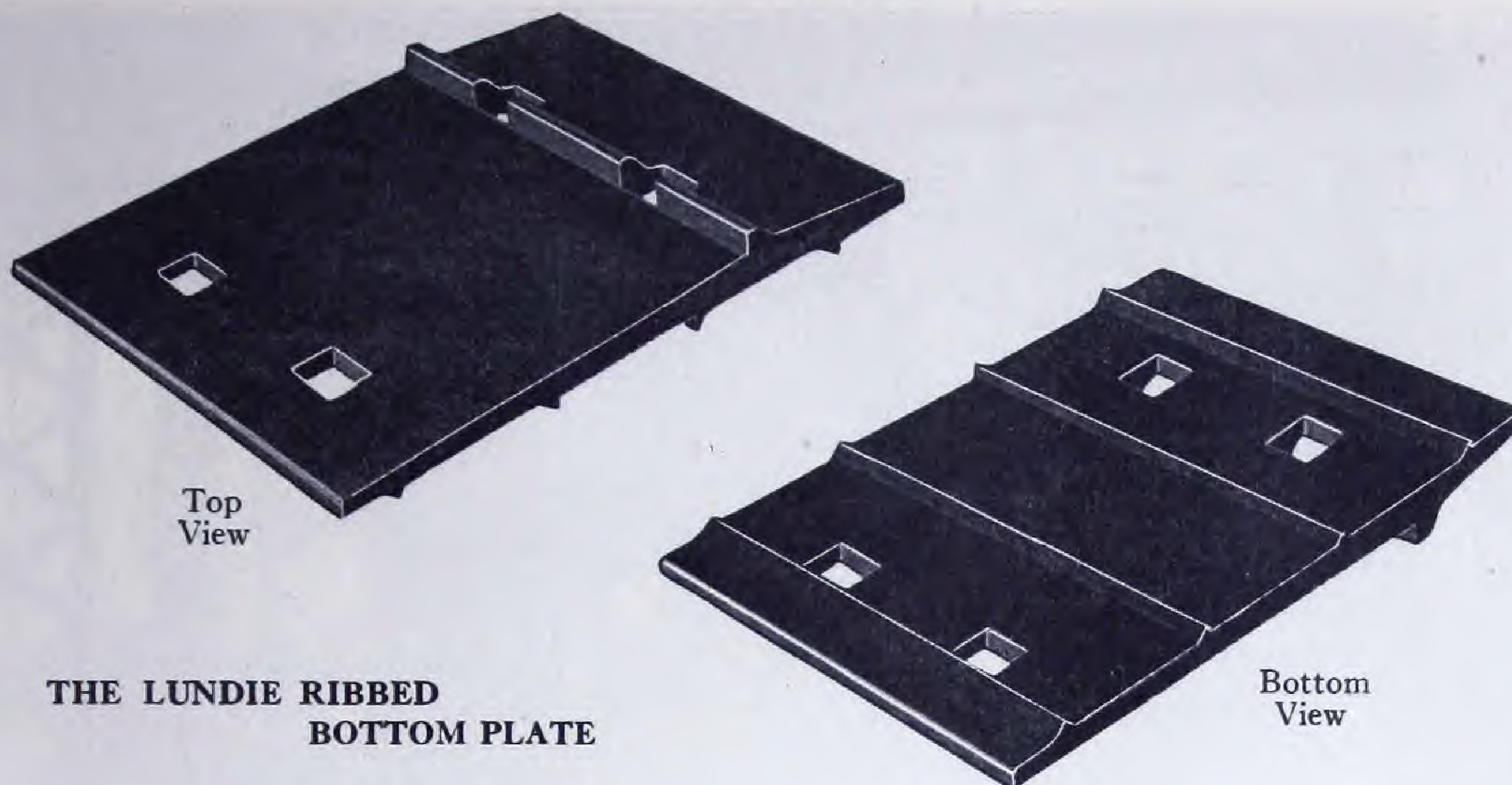
THE LUNDIE RIBBED
BOTTOM PLATE

The illustration above shows the rolling of the ribs for this style of plate.

Supplied 6½" wide x 10½" for 100 lb. rails—weighs approximately 8.41 lbs. per plate, punched as illustrated. This plate can be rolled also in heavier or lighter weights in various widths and punched to specification.

MISCELLANEOUS ROLLED SECTIONS—*Cont'd*

TIE PLATES

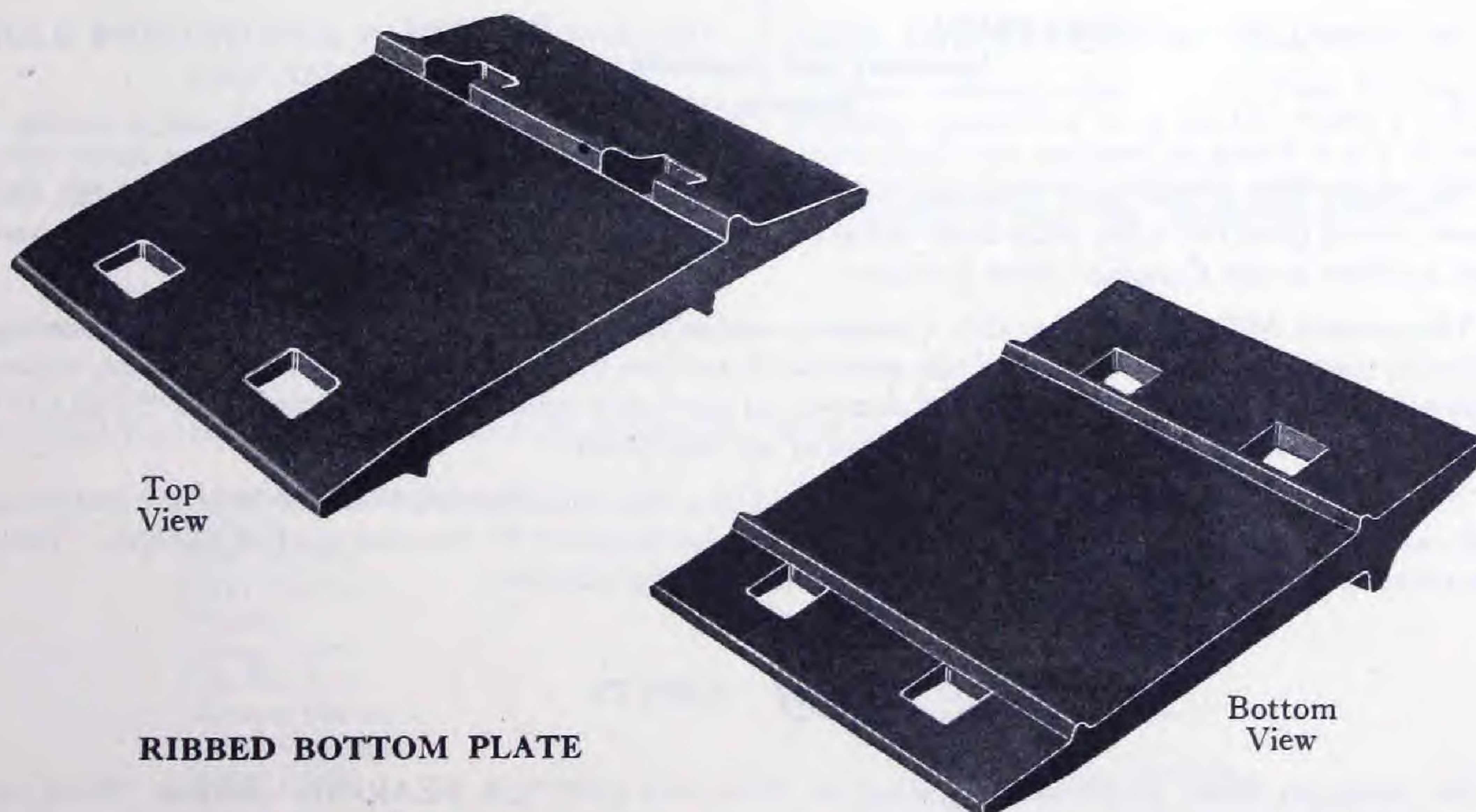


**THE LUNDIE RIBBED
BOTTOM PLATE**

The Lundie Ribbed Bottom Plate as illustrated above showing the rolling of the ribs for this section.

This style of plate is supplied 7" wide x 10" for 80 and 85 lb. rails—weighs approximately 8.73 lbs. per plate, punched as illustrated.

Can be rolled also in heavier or lighter weights, in various widths and punched to specification.



RIBBED BOTTOM PLATE

The illustration above shows the rolling of the ribs for this style of plate.

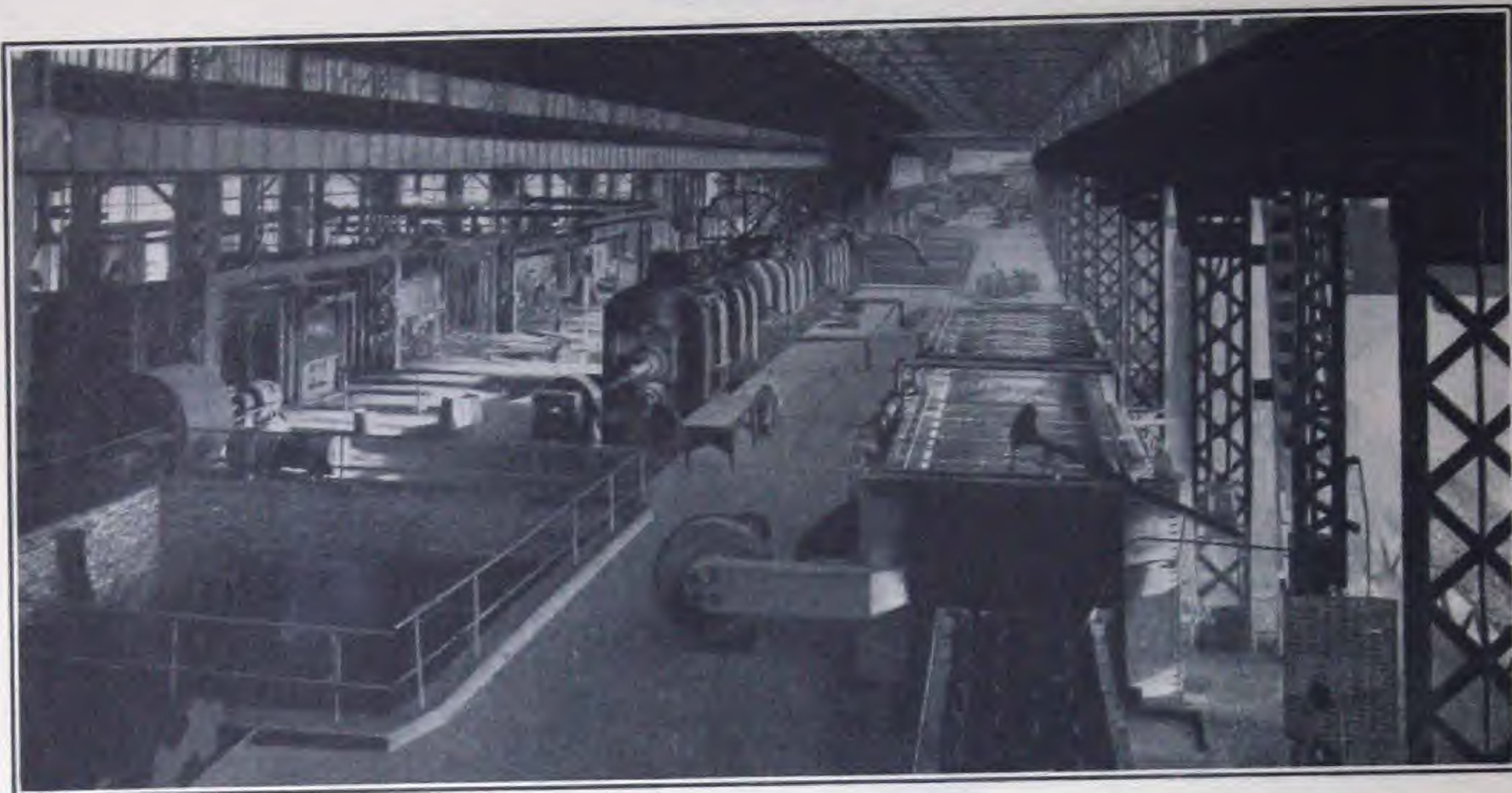
Supplied in 7" wide x 11" for 127 lb. rails—weighs approximately 13.35 lbs. per plate, punched as illustrated. This plate can be rolled also in heavier or lighter weights in various widths and punched to specification.

TIE PLATES FOR 130 LB. RAILS

Styles suitable for 130 lb. rails can be supplied punched to specification.



STEEL SHEETS



General View of the Sheet Mill

OPEN HEARTH STEEL SHEETS

Black

Galvanized

Blue Annealed

Single Pickled

Deoxidized

Japanning and Enamelling Stock

Drawing Stock

The Sheet Mill of the Steel Company of Canada, Limited, the pioneer Sheet Mill in Canada, has grown over a period of a few years from one of relatively small tonnage to one which occupies an important position in the Canadian Steel Industry.

The present Mill operated by this Company, embodying this latest development in Engineering practice, together with the control of raw material in our own Plants from ore to finished product, makes possible the production of Steel Sheets of exceptional merit and uniformity. We offer these "STELCO" Sheets in the various finishes within the range of our equipment.

"STELCO" Galvanized Sheets are manufactured to a rigid specification from the best raw materials only, and the protective zinc coating of uniform thickness is applied by the most modern method. They are noted for their dependable ductility and general working qualities.

*Copper
Bearing*

SHEETS

We desire to draw particular attention to "STELCO COPPER BEARING" Sheets. Being of a specially selected Steel base, with the proper addition of Copper to withstand the attack of corrosive agents, this product is recommended for all purposes where long life and practical economy are essential. "STELCO COPPER BEARING" Sheets are furnished either Black or Galvanized.

Our special galvanized coated Copper Bearing Culvert Stock is particularly adapted for this purpose and other uses where exceptional corrosive resisting qualities are required.



STEEL SHEETS—Cont'd

BLACK AND SPECIAL SHEETS

BLUE ANNEALED

An open annealed product furnished in 16 gauge and heavier, carrying the blue oxide characteristic of steel annealed in an open furnace.

Our blue annealed sheets are roller levelled to insure flatness.

There is a wide diversity of uses to which this product is adapted. The analysis and finish may vary, dependent on the nature of your requirements. It is used extensively for such commodities as steel barrels, buckets, drums, tanks and others.

BOX ANNEALED

The simplest type of black sheet, usually furnished in gauges 17 and lighter, commonly referred to by the Trade as "One Pass Cold Rolled and Box Annealed."

BOX ANNEALED AND FULL COLD ROLLED

Similar to the preceding finish except that an improvement is given to the surface by full cold rolling. Used extensively by the Stove trade for japanning, where a moderate priced product is required.

SINGLE PICKLED

Freed from scale by single pickling. Not cold rolled smooth. Adapted for forming in dies.

SINGLE PICKLED ONE PASS COLD ROLLED AND ANNEALED

The surface is freed from scale by single pickling and later cold rolled smooth. Apart from having the scale removed, the surface is approximately that of one pass stock.

SINGLE PICKLED FULL COLD ROLLED AND ANNEALED

An improvement on the surface of the preceding finish which is imparted by the full cold rolling. It may be mentioned that this finish is not the same as full pickled, full cold rolled sheets.

"B" GRADE FURNITURE STOCK

A carefully inspected product carrying a finish similar to the single pickled, full cold rolled and annealed stock. It can be furnished stretcher levelled and resquared when ordered. Suitable for lockers, fying cases and similar uses where flatness is desired, and in metal furniture where a highly finished surface is not too important.

BLUED STOVE PIPE AND ELBOW STOCK

These are blued sheets that have received no special treatment apart from blueing.

DEOXIDIZED SHEETS

A product carrying the steel gray finish of a deoxidized sheet. Used extensively in gauges 24 and lighter where the scale of an ordinary sheet has a serious effect on die maintenance.

DEEP AND EXTRA DEEP DRAWING QUALITIES

When ordering sheet steel for deep drawing or special forming operations, it is to the buyer's advantage to state clearly the purpose for which it will be used. This will enable us to lend valuable assistance in the selection of qualities to meet the conditions involved.

In addition to the foregoing we manufacture sheets to order for many purposes, a partial list of which follows:—

Agricultural Implements
Barrels
Bow Sockets
Coal Chutes
Drums
Fence Posts
Gas Holders
License Plates
Metal Ceilings
Metal Lath

Powder Kegs
Pulleys
Radiators
Radiator Covers
Range Boilers
Scrapers and Shovels
Switch Boxes
Tacks and Nails
Tanks
Transformer Casings.

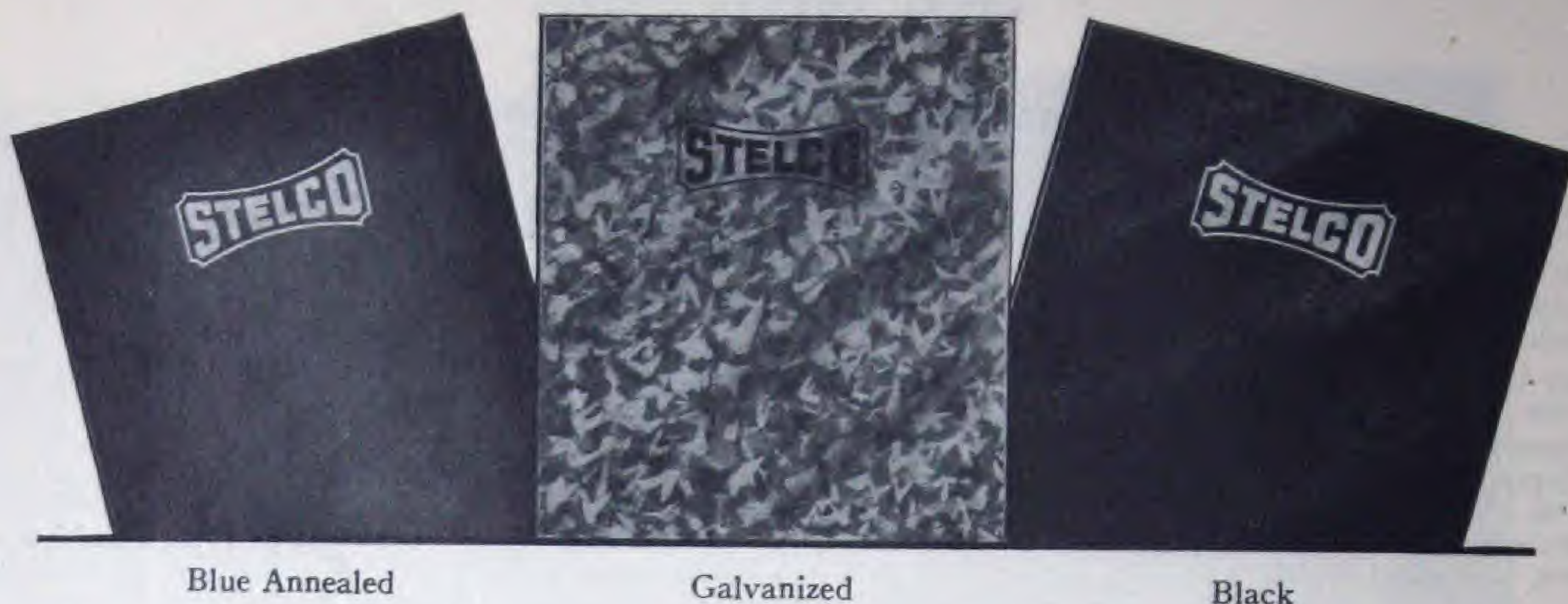
GALVANIZED SHEETS FOR SHEET METAL WORK

The superiority of Stelco Galvanized sheets for sheet metal work of all kinds has resulted in a wide distribution of this product. They combine splendid forming qualities, fine appearance and uniformity and are adapted for every purpose for which this product may be used.

We manufacture standard commercially coated sheets for general purposes, tight coated sheets for bending or forming work, "Extra Heavy" coating for roofing and siding, and special coating for Stelco Copper Bearing Culvert stock and other uses where sheets are subject to extreme exposure.



STEEL SHEETS—Cont'd



Blue Annealed

Galvanized

Black

MAXIMUM WIDTHS AND LENGTHS OF BLACK AND GALVANIZED SHEETS.

Width	48"	44"	40"	36"	30"	24"
Gauge	Length in Inches					
10	120	120	120	120	120	120
11	132	132	132	132	132	132
12	144	144	144	144	144	144
13	144	144	144	144	144	144
14	144	144	144	144	144	144
15	144	144	144	144	144	144
16	144	144	144	144	144	144
17	144	144	144	144	144	144
18	120	144	144	144	144	144
19	120	120	144	144	144	144
20	120	120	120	144	144	144
21	120	120	120	144	144	144
22	120	120	120	144	144	144
23	96	96	96	144	144	144
24	96	96	96	144	144	144
25	.....	96	96	144	144	144
26	.....	.....	96	144	144	144
27	.....	.....	96	120	144	144
28	.....	.....	.....	120	144	144
29	.....	.....	.....	120	144	144
30	.....	.....	.....	96	120	144

MAXIMUM WIDTHS AND LENGTHS OF BLUE ANNEALED SHEETS

Width	48"	44"	40"	36"	30"	24"
Gauge	Length in Inches					
10	120	120	120	120	120	120
11	132	132	132	132	132	132
12	144	144	144	144	144	144
13	144	144	144	144	144	144
14	144	144	144	144	144	144
15	144	144	144	144	144	144
16	144	144	144	144	144	144

We will also roll 8 and 9 gauge when quantities warrant production.



STEEL SHEETS—*Cont'd*

STEEL SHEET STANDARD GAUGES AND WEIGHTS

United States Standard Gauge No.	Approximate Thickness in Fractions of an Inch	Approximate Thickness in Decimals of an Inch	Black & Blue Annealed Weight per Sq. Foot in Lbs.	Galvanized Sheets	
				Weight per Sq. Foot in Lbs.	Weight per Sq. Foot in Ounces
8	$1\frac{1}{64}$	.171875	6.875	7.031	112.5
9	$\frac{5}{32}$	.15625	6.25	6.406	102.5
10	$\frac{9}{64}$	.140625	5.625	5.781	92.5
11	$\frac{1}{8}$	.125	5.	5.156	82.5
12	$\frac{7}{64}$	.109375	4.375	4.531	72.5
13	$\frac{3}{32}$	.09375	3.75	3.906	62.5
14	$\frac{5}{64}$	.078125	3.125	3.281	52.5
15	$\frac{9}{128}$	.0703125	2.8125	2.969	47.5
16	$\frac{1}{16}$	.0625	2.5	2.656	42.5
17	$\frac{9}{160}$	.05625	2.25	2.406	38.5
18	$\frac{1}{20}$	.05	2.	2.156	34.5
19	$\frac{7}{160}$	.04375	1.75	1.906	30.5
20	$\frac{3}{80}$	.0375	1.50	1.656	26.5
21	$1\frac{1}{320}$	.034375	1.375	1.531	24.5
22	$\frac{1}{32}$	.03125	1.25	1.406	22.5
23	$\frac{9}{320}$	.028125	1.125	1.281	20.5
24	$\frac{1}{40}$	.025	1.	1.156	18.5
25	$\frac{7}{320}$	.021875	.875	1.031	16.5
26	$\frac{3}{160}$	.01875	.75	.906	14.5
27	$1\frac{1}{640}$	.0171875	.6875	.844	13.5
28	$\frac{1}{64}$	.015625	.625	.781	12.5
29	$\frac{9}{640}$	.0140625	.5625	.719	11.5
30	$\frac{1}{80}$	.0125	.5	.656	10.5

The Steel Sheet Standard Gauge is a weight gauge, having been based upon the weights per square foot in ounces, and the thicknesses established as approximate equivalents, based upon the weight for wrought iron of .2778 pound per cubic inch, or 480 pounds per cubic foot. Since this gauge was established, wrought iron has almost entirely been superseded by steel, for sheets; and hot rolled steel has been determined to weigh .2833 pound per cubic inch, or 489.6 pounds per cubic foot.

Commercial practice permits of a weight variation of $2\frac{1}{2}\%$ either way on gauges 23 and lighter, $3\frac{1}{2}\%$ on gauges 17 to 22 inclusive, and 5% on gauges 16 and heavier.





STEEL SHEETS—Cont'd

STANDARD DIFFERENTIALS AND EXTRAS

Based on U.S. Standard Gauge

One Pass Cold Rolled and Box Annealed Black Sheets

STANDARD GAUGES AND SIZES

Gauges	Widths inches	Lengths inches
24 and heavier and heavier ineven gauges	24, 26, 28, 30, 36	72, 84, 96, 120
26	24, 26, 28, 30, 36	72, 84, 96, 120
27	24, 26, 28, 30, 36	72, 84, 96, 120
28	24, 26, 28, 30, 36	72, 84, 96, 120
29	24, 26, 28, 30, 36	72, 84, 96, 120
30	24, 26, 28, 30, 36	72, 84, 96, 120

Also, 24 x 101 for Stove Pipe manufacture.

Note.—On all gauges and sizes other than standard, the following Special Extras apply:

	Per 100 lbs.
Items under 5,000 lbs and not less than 2,500 lbs.	10c
Items under 2,500 lbs. and not less than 1,000 lbs..	25c
Items under 1,000 lbs.....	50c

When sizes and gauges other than "standard" are ordered for shipment in "exact quantities" an extra will apply of 10c per 100 lbs.

No reduction for sheets not annealed.

STANDARD DIFFERENTIALS AND EXTRAS

Gauge	Price per 100 lbs.
30.....	Add.....50c
29.....	Add.....40c
28.....	Add.....25c
27.....	Add.....15c
26.....	Add.....10c
24 Carload quantities.....	Base
21-23.....	Deduct... 5c
18-20.....	Deduct...20c
15-17.....	Deduct...30c
12-14.....	Deduct...35c
10-11.....	Deduct...45c

EXTRAS FOR LENGTH

Gauge	Length	Extra per 100 lbs.
16 and heavier.....	Over 60 and longer.	None
16 and heavier.....	Under 60 to 30"	10c
16 and heavier.....	Under 30 to 18"	15c
17 to 24.....	Over 60 to 124"	None
17 to 24.....	Over 124 to 144"	10c
17 to 24.....	Under 60 to 30"	15c
17 to 24.....	Under 30 to 18"	25c
17 to 24.....	Under 18 to 12"	35c
25 and lighter.....	Over 60 to 124"	None
25 and lighter.....	Over 124 to 144"	10c
25 and lighter.....	Under 60 to 30"	20c
25 and lighter.....	Under 30 to 18"	30c
25 and lighter.....	Under 18 to 12"	40c

EXTRAS FOR WIDTH

Gauge	Width	Extra per 100 lbs.
16 and heavier.....	Over 24 to 48".....	None
16 and heavier.....	Under 24 to 12".....	10c
16 and heavier.....	Under 12 to 6".....	20c
17 to 18.....	Over 24 to 36".....	None
17 to 18.....	Over 36 to 48".....	5c
17 to 18.....	Under 24 to 12".....	15c
17 to 18.....	Under 12 to 6".....	25c
19 to 21.....	Over 24 to 36".....	None
19 to 21.....	Over 36 to 44".....	15c
19 to 21.....	Over 44 to 48".....	25c
19 to 21.....	Under 24 to 12".....	15c
19 to 21.....	Under 12 to 6".....	25c
22 to 24.....	Over 24 to 36".....	None
22 to 24.....	Over 36 to 40".....	20c
22 to 24.....	Over 40 to 48".....	40c
22 to 24.....	Under 24 to 12".....	15c
22 to 24.....	Under 12 to 6".....	25c
25 to 27.....	Over 24 to 36".....	None
25 to 27.....	Over 36 to 40".....	20c
25 to 27.....	Over 40 to 44".....	40c
25 to 27.....	Under 24 to 12".....	20c
25 to 27.....	Under 12 to 6".....	30c
28.....	Over 24 to 32".....	None
28.....	Over 32 to 36".....	10c
28.....	Over 36 to 40".....	40c
28.....	Under 24 to 12".....	20c
28.....	Under 12 to 6".....	30c
29 to 30.....	Over 24 to 32".....	None
29 to 30.....	Over 32 to 36".....	10c
29 to 30.....	Under 24 to 12".....	20c
29 to 30.....	Under 12 to 6".....	30c

STANDARD MISCELLANEOUS EXTRAS

	Extra per 100 lbs.
"STELCO" Copper Bearing Sheets.....	15c
Single Pickling—	
16 gauge and heavier.....	25c
17-21 gauge.....	35c
22 gauge and lighter.....	45c
Oiling.....	10c
Liming.....	10c
Deoxidizing.....	15c
Roller Levelling.....	10c
Patent or Stretcher Levelling.....	25c
Extra Box Annealing.....	15c
Full Cold Rolled and Annealed.....	25c
Welding Quality.....	10c
Deep Drawing Quality.....	25c
Extra Deep Drawing Quality.....	50c
Blued Stove Pipe Stock—25 ga. and lighter..	20c
Blued Elbow Stock.....	25c
Resquaring—5% of price of sheet at time of resquaring.	



STEEL SHEETS—Cont'd

STANDARD DIFFERENTIALS AND EXTRAS

Based on U.S. Standard Gauge

Blue Annealed Sheets

STANDARD GAUGES AND SIZES

Gauges	Widths Inches	Lengths Inches
8	24, 26, 28, 30, 36, 42, 48	72, 84, 96, 120
9	24, 26, 28, 30, 36, 42, 48	72, 84, 96, 120
10	24, 26, 28, 30, 36, 42, 48	72, 84, 96, 120
11	24, 26, 28, 30, 36, 42, 48	72, 84, 96, 120
12	24, 26, 28, 30, 36, 42, 48	72, 84, 96, 120, 144
13	24, 26, 28, 30, 36, 42, 48	72, 84, 96, 120, 144
14	24, 26, 28, 30, 36, 42, 48	72, 84, 96, 120, 144
15	24, 26, 28, 30, 36, 42, 48	72, 84, 96, 120, 144
16	24, 26, 28, 30, 36, 42, 48	72, 84, 96, 120, 144

STANDARD DIFFERENTIALS AND EXTRAS

Gauge	Price per 100 lbs.
Blue Annealed Sheets	
13	Base
14	Add 5c
15	Add 10c
16	Add 15c
Light Plates Blue Annealed	
8 and heavier	Less 5c
9 and 10	Base
11	Add 5c
12	Add 10c

EXTRAS FOR WIDTHS

Gauge	Width	Extra per 100 lbs.
16 and Heavier	Under 24" to 12"	Add 10c
16 and Heavier	Under 12" to 6"	Add 15c
16 and Heavier	24" and wider	None

EXTRAS FOR LENGTHS

Gauge	Length	Extra per 100 lbs.
16 and Heavier	60" and longer	None
16 and Heavier	Under 60" to 30"	Add 10c
16 and Heavier	Under 30" to 18"	Add 15c

When sizes and gauges other than "standard" are specified the following extras for quantity apply:—

Items under 5000 lbs. not less than 2500 lbs. 10c per 100 lbs.

Items under 2500 lbs. not less than 1000 lbs. 25c per 100 lbs.

Items under 1000 lbs. 50c per 100 lbs.

When sizes and gauges other than "standard" are ordered for shipment in "exact quantities" an additional extra will apply of 10c per 100 lbs.

PLAIN GALVANIZED SHEETS

Loose or in Bundles

STANDARD GAUGES AND SIZES

Gauges	Widths Inches	Lengths Inches
30	24, 26, 28, 30, 36	72, 84, 96, 120
10 $\frac{3}{4}$ oz.	24, 26, 28, 30, 36	72, 84, 96, 120
28	24, 26, 28, 30, 36	72, 84, 96, 120
27	24, 26, 28, 30, 36	72, 84, 96, 120
26	24, 26, 28, 30, 36	72, 84, 96, 120
24	24, 26, 28, 30, 36	72, 84, 96, 120
22	24, 26, 28, 30, 36	72, 84, 96, 120
20	24, 26, 28, 30, 36	72, 84, 96, 120
18	24, 26, 28, 30, 36	72, 84, 96, 120
16	24, 26, 28, 30, 36	72, 84, 96, 120
14	24, 26, 28, 30, 36	72, 84, 96, 120
12	24, 26, 28, 30, 36	72, 84, 96, 120
10	24, 26, 28, 30, 36	72, 84, 96, 120

GAUGE DIFFERENTIALS

Gauge	Price per 100 lbs.
30	Add 90c
10 $\frac{3}{4}$ oz.	Add 90c
29	Add 70c
28	Add 50c
27	Add 35c
25-26	Add 25c
24	Base
21-23	Deduct 15c
19-20	Deduct 20c
18	Deduct 35c
15-17	Deduct 50c
12-14	Deduct 60c
10-11	Deduct 70c



STEEL SHEETS—Cont'd

STANDARD DIFFERENTIALS AND EXTRAS

Plain Galvanized Sheets

EXTRAS FOR WIDTH

Gauge	Width	Extra per 100 Lbs.	Gauge	Width	Extra per 100 Lbs.
16 and heavier.....	Under 24 to 12"	20c	19-21.....	Over 40 to 44"	30c
	Under 12 to 6"	25c		Over 44 to 48"	40c
17-24.....	Under 24 to 12"	20c	22-24.....	Over 32 to 36"	None
	Under 12 to 6"	30c		Over 36 to 40"	20c
25 and lighter.....	Under 24 to 12"	25c		Over 40 to 44"	40c
	Under 12 to 6"	35c		Over 44 to 48"	60c
All gauges.....	24 to 32"	None	25-26.....	Over 32 to 36"	None
10-15.....	Over 32 to 40"	None		Over 36 to 40"	30c
	Over 40 to 44"	10c		Over 40 to 44"	60c
	Over 44 to 48"	20c	27.....	Over 32 to 36"	10c
16-18.....	Over 32 to 36"	None		Over 36 to 40"	50c
	Over 36 to 44"	10c	28.....	Over 32 to 36"	20c
	Over 44 to 48"	20c	10 $\frac{3}{4}$ oz.....	Over 32 to 36"	20c
19-21.....	Over 32 to 36"	None	29-30.....	Over 32 to 36"	20c
	Over 36 to 40"	20c			

EXTRAS FOR LENGTH

Gauge	Length	Extra per 100 Lbs.	Gauge	Length	Extra per 100 Lbs.
16 and heavier.....	Under 60 to 30"	10c	25 and lighter.....	Under 30 to 18"	35c
16 and heavier.....	Under 30 to 18"	20c	16 and heavier.....	60 to 144"	None
17 to 24.....	Under 60 to 30"	20c	17 and lighter.....	60 to 124"	None
17 to 24.....	Under 30 to 18"	30c	17 and lighter.....	Over 124 to 144"	10c
25 and lighter.....	Under 60 to 30"	25c			

SHEET MILL TOLERANCES

WIDTH

All Grades
Not scant.
Not in excess by more than $\frac{1}{4}$ "

Resquared
Not over $\frac{1}{16}$ ".

LENGTH

Blue Annealed
Not scant.
Not over $\frac{1}{2}$ " for 120" long.
Plus $\frac{1}{4}$ " for each 60" additional.

One Pass and Galvanized
Not scant.
Not over $\frac{3}{4}$ " for 96" long.
Plus $\frac{1}{4}$ " for each 24" additional.

Cold Rolled after Annealed
2 inches.

Resquared
Not over $\frac{1}{16}$ ".

OUT OF SQUARE
 $\frac{1}{8}$ " per foot of sheet width.

Patent Levelled not Resquared

WIDTH
Not scant.
Not more than $\frac{1}{2}$ " up to 96" long.
 $\frac{3}{4}$ "—96" to 120" long.
1" over 120" long.

LENGTH
Must have length ordered between grip marks.
Excess length not more than 6".
If "No allowance for grip marks" be ordered, excess should not be over 3" for 120" and 4" for longer sheets.

CAMBER

Blue Annealed
 $\frac{1}{4}$ " up to 144" long.
 $\frac{1}{2}$ "—144" to 216" long.
 $\frac{3}{4}$ " over 216" long.

One Pass and Galvanized
 $\frac{1}{4}$ " up to 72" long.
 $\frac{3}{8}$ "—72" to 96" long.
 $\frac{1}{2}$ "—96" to 120" long.
 $\frac{5}{8}$ " over 120" long.

Resquared
 $\frac{1}{16}$ " up to 120" long.
 $\frac{1}{8}$ " over 120" long.



STEEL SHEETS—Cont'd

PLAIN GALVANIZED SHEETS

Table showing weights per bundle without bands, per square foot, per sheet and number of sheets in a bundle.

Gauges 12				14			16			
Lbs. per sq. foot 4.531				3.281			2.656			
Size in Inches	Lbs. per Sheet	Sheets per Bdle.	Lbs. per Bdle.	Lbs. per Sheet	Sheets per Bdle.	Lbs. per Bdle.	Lbs. per Sheet	Sheets per Bdle.	Lbs. per Bdle.	Square feet per Sheet
24 x 72.....	54.37	3	163	39.37	4	157	31.87	5	159	12
30 x 72.....	67.97	2	136	49.22	3	148	39.84	4	159	15
36 x 72.....	81.56	2	163	59.06	3	177	47.81	3	143	18
24 x 84.....	63.44	2	127	45.94	3	138	37.19	4	149	14
30 x 84.....	79.30	2	159	57.42	3	172	46.48	3	139	17½
36 x 84.....	95.16	2	190	68.91	2	138	55.78	3	167	21
24 x 96.....	72.50	2	145	52.50	3	157	42.50	4	170	16
30 x 96.....	90.62	2	181	65.62	2	131	53.12	3	159	20
36 x 96.....	108.75	1	109	78.75	2	157	63.75	2	127	24
24 x 108.....	81.56	2	163	59.06	3	177	47.81	3	143	18
30 x 108.....	101.95	2	204	73.82	2	148	59.76	3	179	22½
36 x 108.....	122.34	1	122	88.59	2	177	71.71	2	143	27
24 x 120.....	90.62	2	181	65.62	2	131	53.12	3	159	20
30 x 120.....	113.28	1	113	82.03	2	164	66.41	2	133	25
36 x 120.....	135.94	1	136	98.44	2	197	79.69	2	159	30
Gauges 18				20			22			
Lbs. per sq. foot 2.156				1.656			1.406			
24 x 72.....	25.87	6	155	19.87	8	159	16.87	9	152	12
30 x 72.....	32.34	5	162	24.84	6	149	21.09	7	148	15
36 x 72.....	38.81	4	155	29.81	5	149	25.31	6	152	18
24 x 84.....	30.19	5	151	23.19	7	162	19.69	8	158	14
30 x 84.....	37.73	4	151	28.98	5	145	24.61	6	148	17½
36 x 84.....	45.28	3	136	34.78	4	139	29.53	5	148	21
24 x 96.....	34.50	4	138	26.50	6	159	22.50	7	157	16
30 x 96.....	43.12	4	172	33.12	5	166	28.12	5	141	20
36 x 96.....	51.75	3	155	39.75	4	159	33.75	5	169	24
24 x 108.....	38.81	4	155	29.81	5	149	25.31	6	152	18
30 x 108.....	48.51	3	146	37.26	4	149	31.64	5	158	22½
36 x 108.....	58.21	3	175	44.71	4	179	37.96	4	152	27
24 x 120.....	43.12	3	129	33.12	5	166	28.12	5	141	20
30 x 120.....	53.91	3	162	41.41	4	166	35.16	4	141	25
36 x 120.....	64.69	2	129	49.69	3	149	42.19	4	169	30

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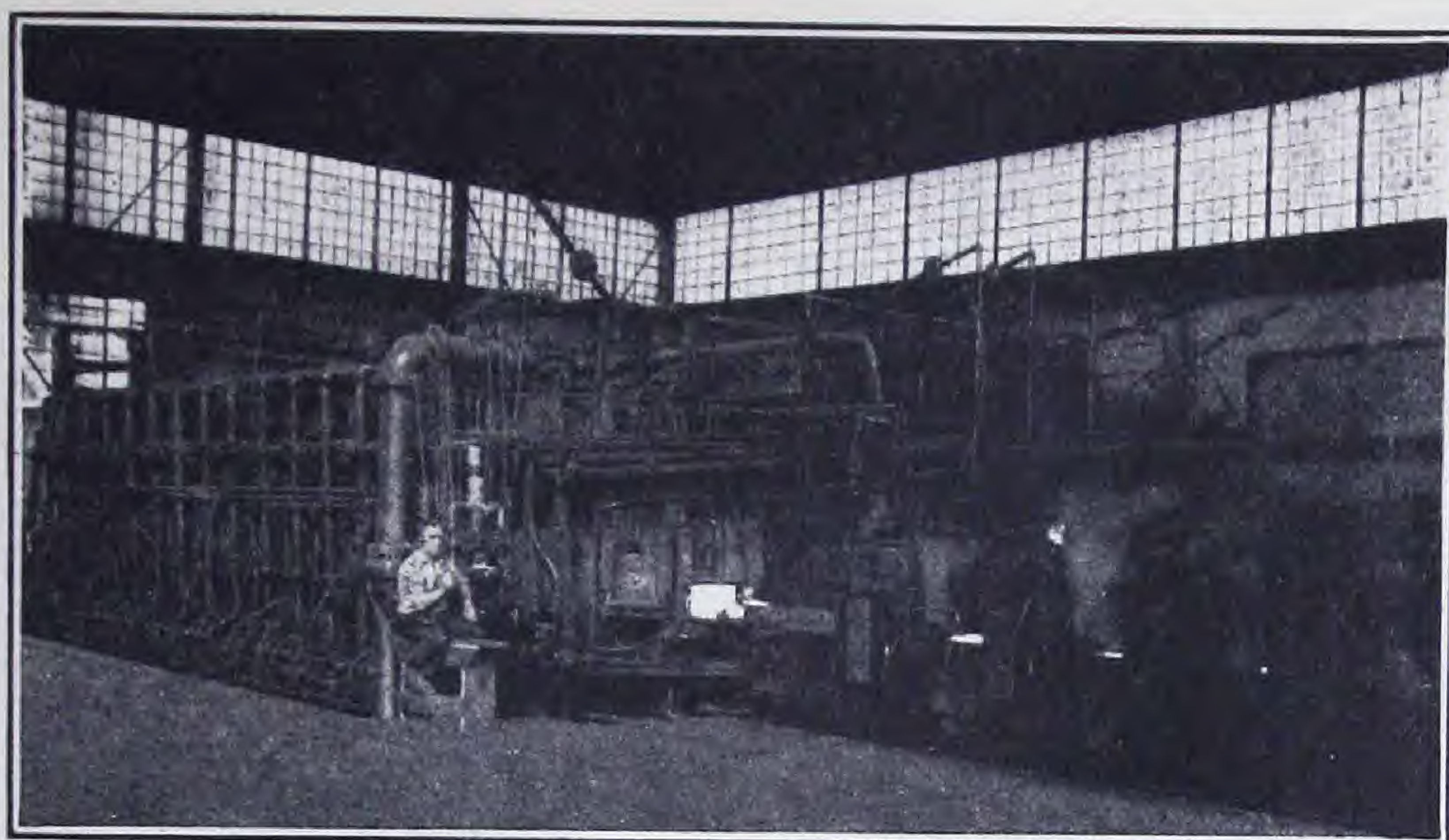
STEEL SHEETS—Cont'd

PLAIN GALVANIZED SHEETS

Table showing weights per bundle without bands, per square foot, per sheet and number of sheets in a bundle.

Gauges 24				26			28			
Lbs. per sq. foot 1.156				.906			.781			
Size in Inches	Lbs. per Sheet	Sheets per Bdle.	Lbs. per Bdle.	Lbs. per Sheet	Sheets per Bdle.	Lbs. per Bdle.	Lbs. per Sheet	Sheets per Bdle.	Lbs. per Bdle.	Square feet per Sheet
24 x 72.....	13.87	11	153	10.87	14	152	9.37	16	150	12
30 x 72.....	17.34	9	156	13.59	11	149	11.72	13	152	15
36 x 72.....	20.81	7	146	16.31	9	147	14.06	11	155	18
24 x 84.....	16.19	9	146	12.69	12	152	10.94	14	153	14
30 x 84.....	20.23	7	142	15.86	10	159	13.67	11	150	17½
36 x 84.....	24.28	6	146	19.03	8	152	16.41	9	148	21
24 x 96.....	18.50	8	148	14.50	10	145	12.50	12	150	16
30 x 96.....	23.12	7	162	18.12	8	145	15.62	10	156	20
36 x 96.....	27.75	6	166	21.75	7	152	18.75	8	150	24
24 x 108.....	20.81	7	146	16.31	9	147	14.06	11	155	18
30 x 108.....	26.01	6	156	20.39	8	163	17.57	9	158	22½
36 x 108.....	31.21	5	156	24.46	6	147	21.09	7	148	27
24 x 120.....	23.12	7	162	18.12	8	145	15.62	10	156	20
30 x 120.....	28.91	5	145	22.66	7	159	19.53	8	156	25
36 x 120.....	34.69	5	173	27.19	6	163	23.44	7	164	30
Gauges 30				10¾ oz.						
Lbs. per sq. foot .656				.672						
24 x 72.....	7.87	19	150	8.06	18	145	.....	.....	.....	12
30 x 72.....	9.84	15	148	10.08	15	151	.....	.....	.....	15
36 x 72.....	11.81	13	154	12.09	12	145	.....	.....	.....	18
24 x 84.....	9.19	16	147	9.41	16	151	.....	.....	.....	14
30 x 84.....	11.48	13	149	11.76	13	153	.....	.....	.....	17½
36 x 84.....	13.78	11	152	14.11	11	155	.....	.....	.....	21
24 x 96.....	10.50	15	157	10.75	14	151	.....	.....	.....	16
30 x 96.....	13.12	11	144	13.44	11	148	.....	.....	.....	20
36 x 96.....	15.75	10	157	16.13	9	145	.....	.....	.....	24
24 x 108.....	11.81	13	154	12.10	13	157	.....	.....	.....	18
30 x 108.....	14.76	10	148	15.12	10	151	.....	.....	.....	22½
36 x 108.....	17.71	9	159	18.14	8	145	.....	.....	.....	27
24 x 120.....	13.12	11	144	13.44	11	148	.....	.....	.....	20
30 x 120.....	16.41	9	148	16.80	9	151	.....	.....	.....	25
36 x 120.....	19.69	8	158	20.16	8	161	.....	.....	.....	30

RODS



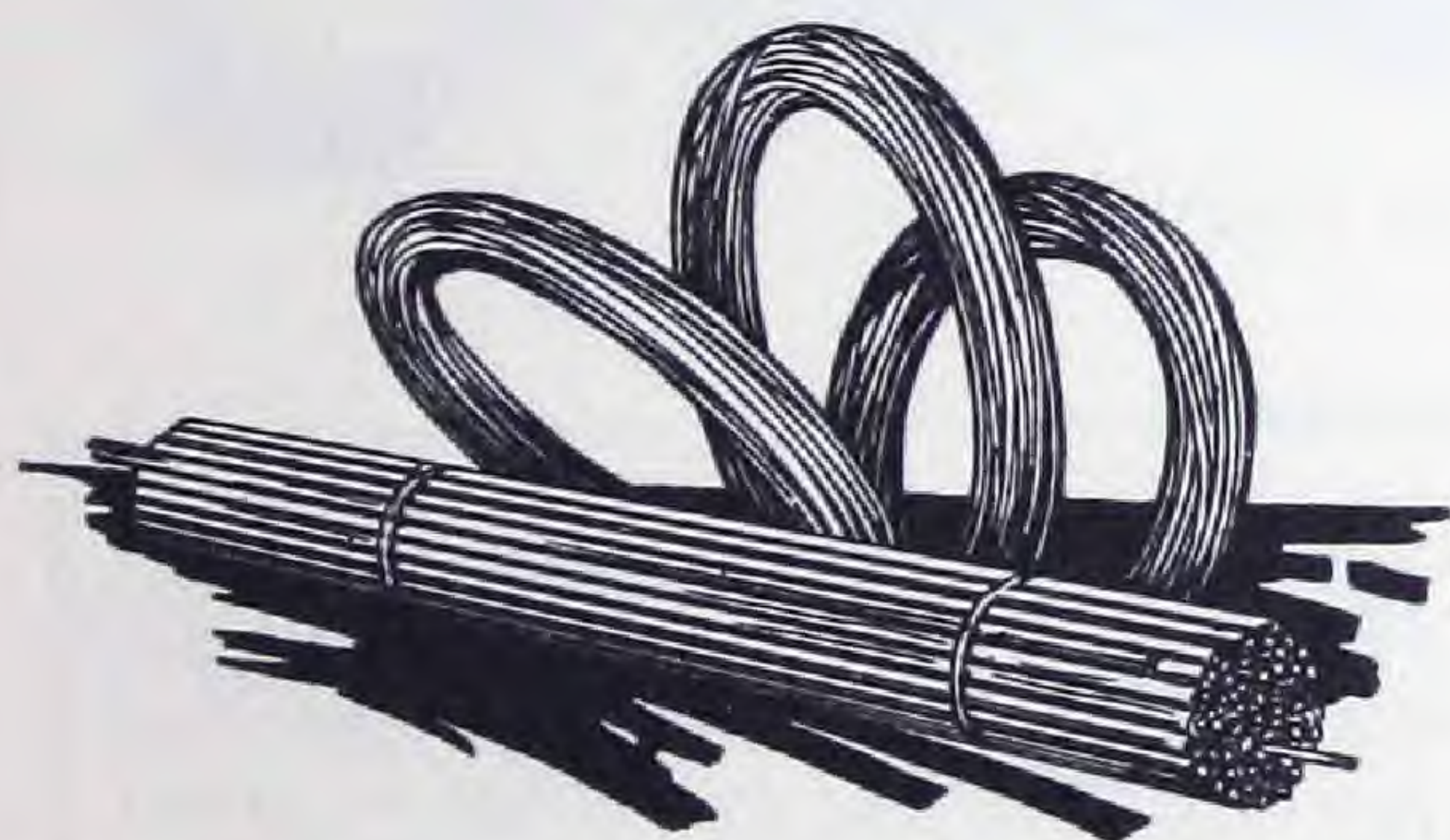
Wire Rod Mill—Heating Furnaces and Roughing Stands

The rod mill is of the continuous type and consists of sixteen stands of rolls. Billets are heated in a continuous furnace located at the roughing end of the mill. The mill is equipped with both reels and cooling bed therefore material can be produced, the smaller diameters in coils and the heavier diameters in straight lengths.

A modern patenting furnace is also available for heat treating rods of spring and other special quality steels.

CONCRETE REINFORCING RODS

In Coils



We furnish Basic Open Hearth Steel wire rods in coils for reinforcing concrete columns in the following sizes:

Diameter of Rod in Inches	Inside Diameter of Coil in Inches
$\frac{1}{4}$	30
$\frac{5}{16}$	30
$\frac{3}{8}$	30
$\frac{7}{16}$	30
$\frac{1}{4}$	26
$\frac{5}{16}$	26
$\frac{3}{8}$	26
$\frac{7}{16}$	26
$\frac{1}{4}$	22
$\frac{5}{16}$	22
$\frac{3}{8}$	22

Weight of each coil approximately 150 pounds.

Prices on Application.

CONCRETE REINFORCING RODS

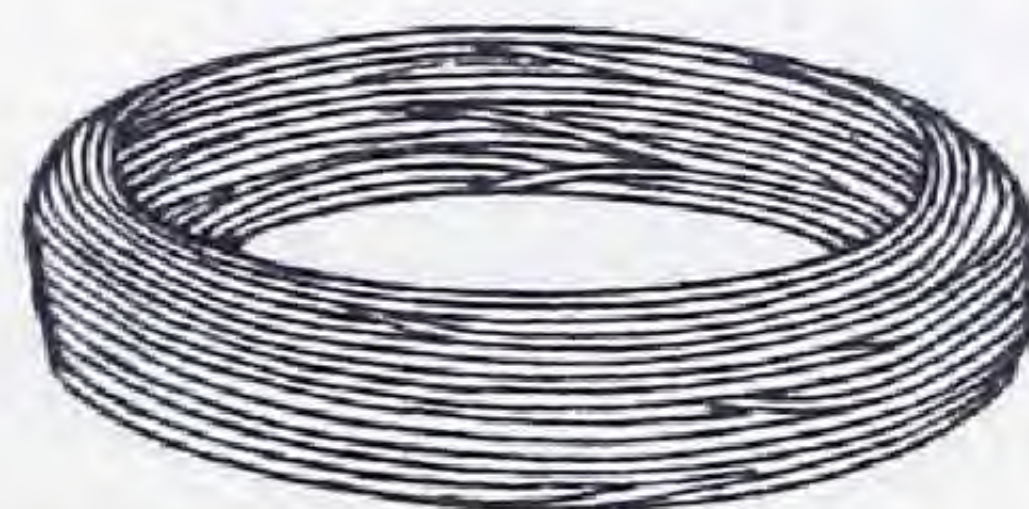
Cut and Straightened

Basic Open Hearth Steel wire rods cut to exact lengths and straightened to suit the requirements of the work are furnished in the following diameters:

$\frac{3}{16}$ "	$\frac{5}{16}$ "	$\frac{3}{8}$ "
$\frac{1}{4}$ "	$\frac{19}{64}$ "	$\frac{7}{16}$ "
$\frac{15}{64}$ "	$\frac{23}{64}$ "	$\frac{1}{2}$ "

Prices on Application.

WIRE RODS

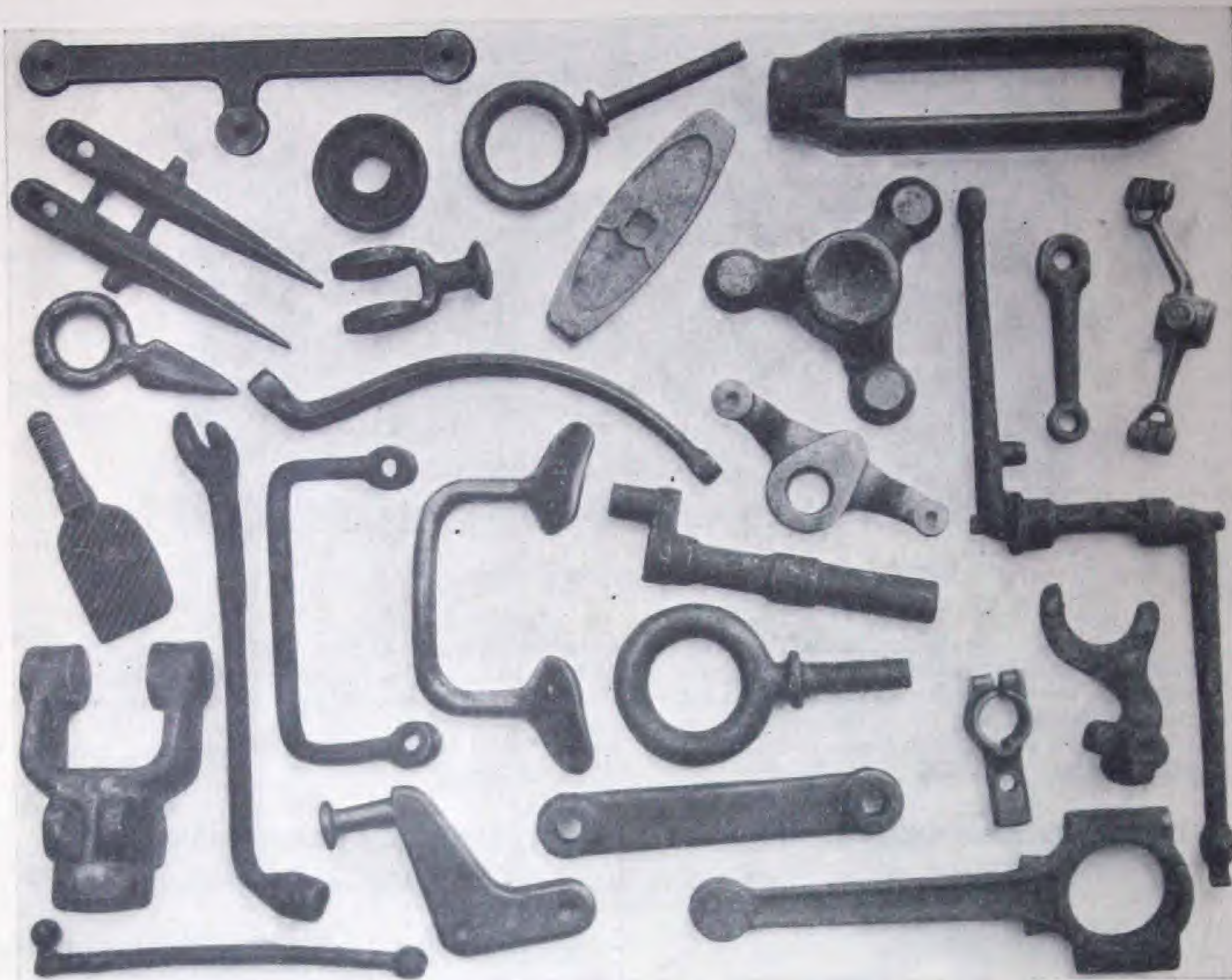


Made of Basic Open Hearth Steel from our furnaces at Hamilton and rolled in our Rod Mills at the same plant. Furnished in A.S. & W. Gauges No. 5 and larger in the following qualities:—

ORDINARY	TELEPHONE
RIVET	SPRING
CHAIN	HIGH CARBON
WELDING	HORSE NAIL
TELEGRAPH	SCREW
COPPER BEARING	

Particulars covering Welding Rods will be found in the "Wire Section."

DROP FORGINGS



SPECIAL LIGHT FORGINGS

Our Gananoque Plants are equipped to produce light drop forgings in weights from two ounces to six pounds, depending upon the shape or design.

Forging quality steels, from our steel producing plant, form the raw product and can be specified to add strength, machinability, threading quality or reduction in weight as each particular case warrants.

The Gananoque Plants concentrate on the manufacture of drop forgings and are equipped with drop hammers, trimming presses, upsetters, heat treating equipment, millers, threaders, drills and electric butt welding equipment. They are in a position to manufacture a wide range of semi-finished and fully machined drop forgings.

SHEET METAL STAMPINGS

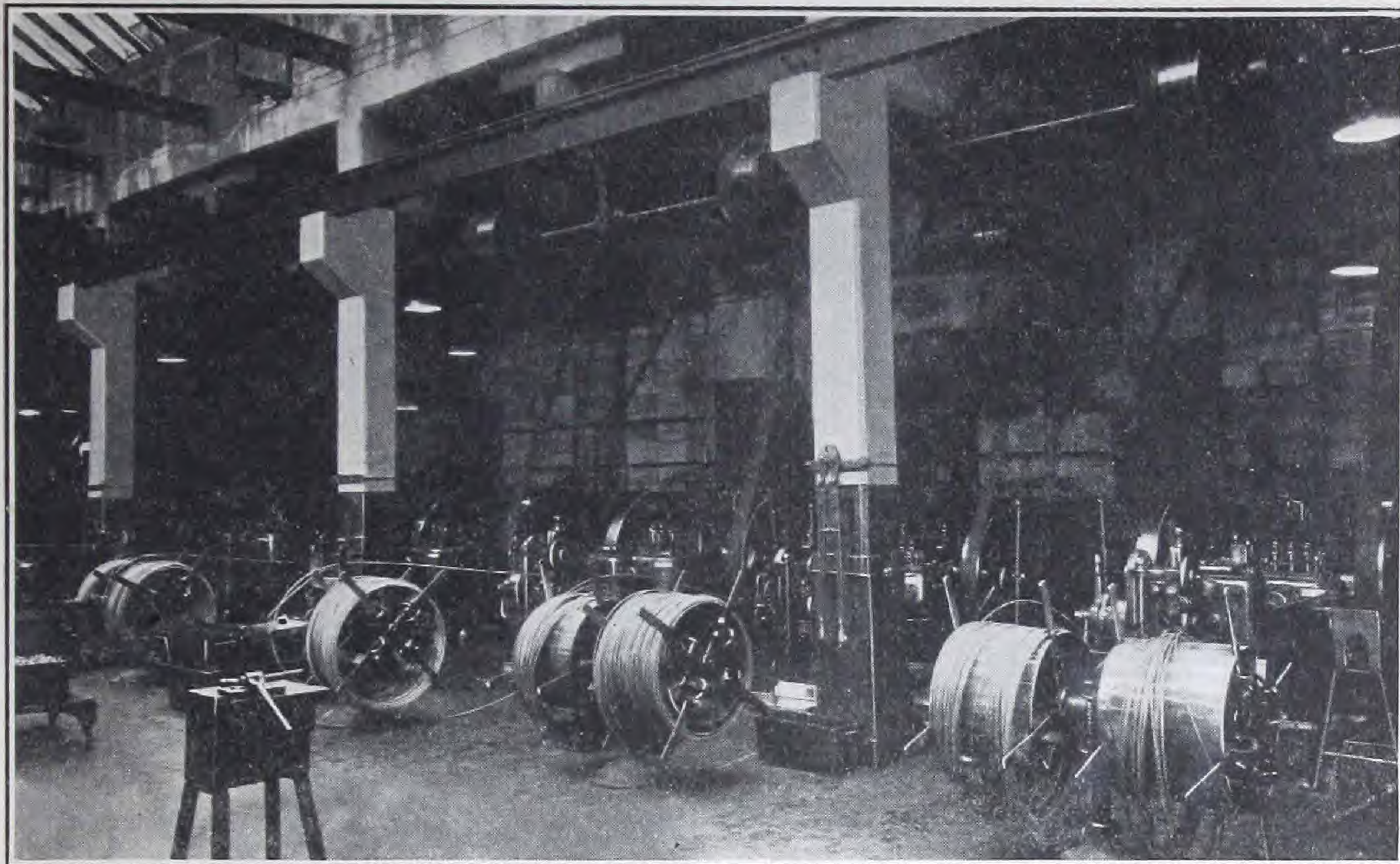
The press equipment also places the manufacture of Sheet Metal Stampings within our range.



Submit blueprints or sketches for full particulars and prices.



BOLTS AND NUTS

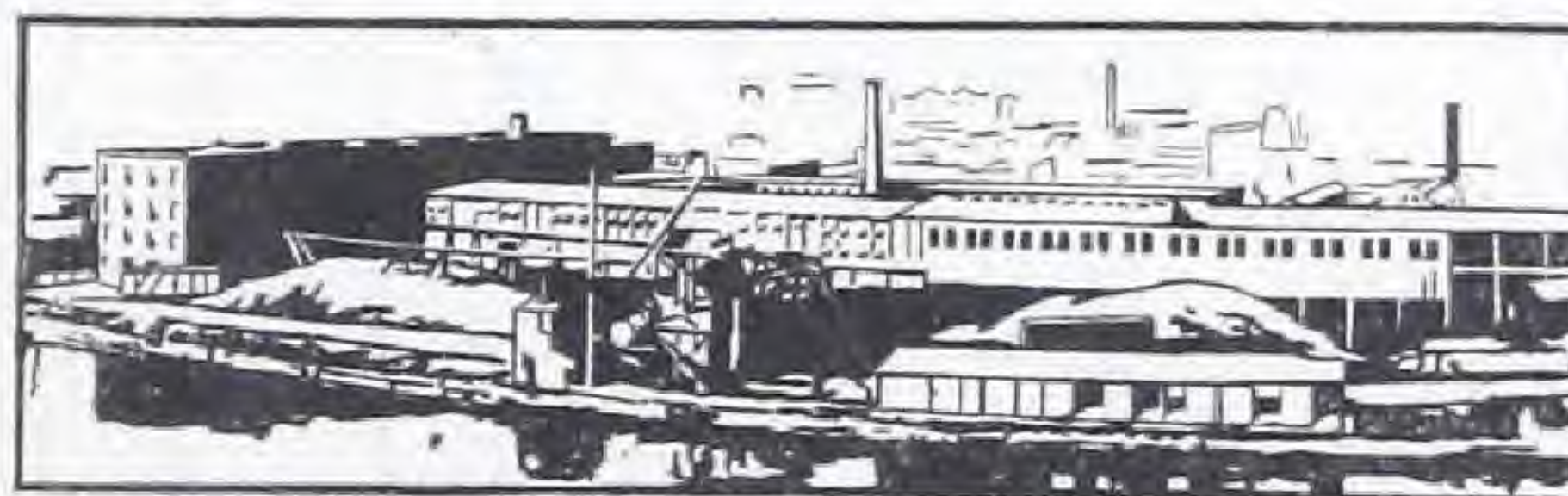


A Section of the Cold Heading Department at Notre Dame Works

FOUR BOLT PLANTS MAINTAIN SERVICE



Swansea Works, Toronto



Notre Dame Works, Montreal



Canada Works, Hamilton



Brantford Works, Brantford

Because we produce our own raw material and control every process of manufacture in our plants, we are able to maintain an unvarying high standard of quality for every bolt and nut we make.

As a result of years of experience in making bolts, we have developed a special steel eminently suited to this purpose.

Manufacturing facilities are both modern and complete, and careful inspection throughout the various processes of manufacture assures accuracy.

Four bolt and nut plants, each capable of large quantity production are located at strategic points for shipment. Warehouses at each of these plants carry large stocks of all standard sizes, thus ensuring prompt shipment of our customers' orders.

BOLTS AND NUTS—Cont'd



Hot Nut Department, Swansea Works

STANDARD LENGTHS OF THREADS FOR CARRIAGE AND MACHINE BOLTS

Length of Bolt in Inches	Diameter of Bolt in Inches										
	$\frac{3}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1
	Length of Thread in Inches										
Up to $1\frac{1}{4}$	To head	To head	To head	To head	To head	To head	To head	To head	To head	To head	To head
Up to $1\frac{1}{2}$	1	$1\frac{1}{8}$	...	...	...	...	...	...
Over $1\frac{1}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{7}{8}$	...	...	$1\frac{1}{4}$	...	...	...	...	...
Over $1\frac{1}{2}$	$1\frac{1}{2}$	...	...	...	...	...
Over $1\frac{1}{2}$ to 12.....	$1\frac{1}{4}$	...	...	...	...
Over 12.....	$1\frac{1}{2}$	...	...	...	...
Over $1\frac{1}{2}$ to 12.....	$1\frac{1}{2}$	...	...	...
Over 12.....	$1\frac{1}{2}$	...	...
Over $1\frac{1}{2}$ to 12.....	$1\frac{1}{2}$	...
Over 12 to 18.....	$1\frac{1}{2}$
Over 18.....	$1\frac{3}{4}$
Over $1\frac{1}{2}$ to 4.....
Over 4 to 12.....
Over 12 to 18.....
Over 18.....
Over $1\frac{1}{2}$ to 4.....
Over 4 to 6.....
Over 6 to 12.....
Over 12 to 18.....
Over 18.....
Over $1\frac{1}{2}$ to 4.....
Over 4 to 6.....
Over 6 to 12.....
Over 12 to 18.....
Over 18.....
For each additional $\frac{1}{4}$ inch of Thread these net extras apply per 100 Bolts	...	\$0.02	\$0.02	\$0.02 $\frac{1}{2}$	\$0.03	\$0.04	\$0.04	\$0.06	\$0.08	\$0.10	\$0.12

Note:—All bolts over 1" diameter up to 4" long, thread to be $1\frac{1}{2}$ times diameter of bolt; over 4" to 6" long thread to be $1\frac{3}{4}$ times diameter of bolt; over 6" to be twice the diameter of bolt.



BOLTS AND NUTS—Cont'd

FORMS AND DIMENSIONS OF THREADS

C.E.S.A.
or
U.S.
Standard



60
Degrees

U.S. STANDARD

The United States Standard Thread has been adopted by the Steel Company of Canada Limited, as the standard for bolts and nuts referring particularly to fractional sizes.

It will be found upon comparison that C.E.S.A. coarse threads and U.S. Standard Threads are exactly the same, therefore when it is stated that Stove Bolts and Sink Bolts follow the C.E.S.A. Coarse thread standard they in reality are threaded with U.S. Standard Threads.

Diameter in Inches	Threads per Inch	Diam. at Root of Thread	Diameter in Inches	Threads per Inch	Diam. at Root of Thread
$\frac{1}{4}$	20	.185	$1\frac{3}{8}$	6	1.159
$\frac{5}{16}$	18	.240	$1\frac{1}{2}$	6	1.284
$\frac{3}{8}$	16	.294	$1\frac{5}{8}$	$5\frac{1}{2}$	1.389
$\frac{7}{16}$	14	.345	$1\frac{3}{4}$	5	1.490
$\frac{1}{2}$	13	.400	$1\frac{7}{8}$	5	1.615
$\frac{9}{16}$	12	.454	2	$4\frac{1}{2}$	1.711
$\frac{5}{8}$	11	.507	$2\frac{1}{4}$	$4\frac{1}{2}$	1.961
$1\frac{1}{16}$	10	.620	$2\frac{1}{2}$	4	2.175
$\frac{3}{4}$	9	.731	$2\frac{3}{4}$	4	2.425
$\frac{7}{8}$	8	.838	3	$3\frac{1}{2}$	2.629
1	8	.939	$3\frac{1}{4}$	$3\frac{1}{4}$	2.879
$1\frac{1}{8}$	7	1.064	$3\frac{1}{2}$	$3\frac{1}{4}$	3.100
$1\frac{1}{4}$	7		$3\frac{3}{4}$	3	3.317
			4	3	3.567

C.E.S.A. STANDARD

The Canadian Engineering Standards Association Thread, fine and coarse, has been adopted by the Steel Company of Canada Limited, as the Standard for all Machine Screws. The form of thread is the same angle and shape as the U.S. Standard and A.S.M.E. Standard.

No. of Screw	Fractional Size of Screw	Threads per Inch	Maximum Diam. at Root of Thread	No. of Screw	Fractional Size of Screw	Threads per Inch	Maximum Diam. at Root of Thread
2	$1\frac{1}{16}$	64	.0668	10	$\frac{3}{16}$	32	.1517
2	$1\frac{1}{16}$	56	.0641	10	$\frac{3}{16}$	24	.1389
3	$\frac{13}{16}$	56	.0771	12	$\frac{7}{32}$	28	.1722
3	$\frac{13}{16}$	48	.0734	12	$\frac{7}{32}$	24	.1649
4	$\frac{7}{16}$	48	.0864		$\frac{1}{4}$	28	.2062
4	$\frac{7}{16}$	40	.0813		$\frac{1}{4}$	20	.1887
5	$\frac{1}{8}$	40	.0943		$\frac{5}{16}$	24	.2614
6	$\frac{9}{16}$	40	.1073		$\frac{5}{16}$	18	.2443
6	$\frac{9}{16}$	32	.0997				
8	$2\frac{1}{16}$	36	.1299		$\frac{3}{8}$	24	.3239
8	$2\frac{1}{16}$	32	.1257		$\frac{3}{8}$	16	.2983

Note:—Coarse threads are in bold face type.

S.A.E. (Society of Automobile Engineers) and A.L.A.M. (Association of Licensed Automobile Manufacturers Standard) are the same as C.E.S.A. and A.S.M.E. fine threads.

TO DETERMINE THE LENGTH OF BOLTS

Measurements—All Square, Hexagon, Button, Round, Cone, Round Head Square Neck, and Square Head Square Neck Bolts are measured from under head to point.

All Countersunk, Elevator and Plow Bolts, Bolt Ends, and Table or Hanger Bolts, are measured from end to end.

CONTENTS OF PACKAGES

Carriage and Machine Bolts

Diameter in Inches	In Packages		In Bulk
	Length Inches	Quantity in Pkg.	Length Inches
$\frac{3}{16}$ and $\frac{1}{4}$	All to 12	100	All over 12
$\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$	" " 12	50	" " 12
$\frac{1}{2}$	" " $9\frac{3}{4}$	50	" " 12
$\frac{1}{2}$	over $9\frac{3}{4}$ to 12	25	" " 12
$\frac{5}{8}$	All to 10	25	" " 10
$\frac{3}{4}$	" " 8	25	" " 8

Coach Screws

$\frac{1}{4}$	All to 12	100	All over 12
$\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$	" " 12	50	" " 12
$\frac{5}{8}$	" " 10	25	" " 10
$\frac{3}{4}$	" " 9	25	" " 9

Tire and Sleigh Shoe Bolts

$\frac{3}{16}$ and $\frac{1}{4}$	All to 12	100	All over 12
$\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$	" " 12	50	" " 12
$\frac{1}{2}$	" " $9\frac{3}{4}$	50	" " 12
$\frac{1}{2}$	over $9\frac{3}{4}$ to 12	25	" " 12
$\frac{5}{8}$	All to 10	25	" " 10
$\frac{3}{4}$	" " 8	25	" " 8

Plow Bolts

$\frac{5}{16}$ to $\frac{1}{2}$	All	50
$\frac{9}{16}$, $\frac{5}{8}$	All	25

Stove and Sink Bolts

All Sizes....	All	100	Also in Bulk
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Elevator Bolts

All Sizes....	All	100
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BOLTS AND NUTS—Cont'd

CARRIAGE BOLTS

All measured under the head



Common



Fin Head



Round Neck

List Price per 100.

Adopted January 2, 1924.

From this list Askew Head, Common, Round Neck, Convex Head, Fluted and Fin Head bolts are sold at varying discounts:—

Length Under the Head Inches	$\frac{3}{16}$ and $\frac{1}{4}$ Inch Diameter	$\frac{5}{16}$ Inch Diameter	$\frac{3}{8}$ Inch Diameter	$\frac{7}{16}$ Inch Diameter	$\frac{1}{2}$ Inch Diameter	$\frac{9}{16}$ and $\frac{5}{8}$ Inch Diameter	$\frac{3}{4}$ Inch Diameter
1½.....	\$1.00	\$1.40	\$1.90	\$2.50			
2.....	1.10	1.55	2.10	2.75			
2½.....	1.20	1.70	2.30	3.00	\$3.25	\$6.00	\$9.80
3.....	1.30	1.85	2.50	3.25	3.55	6.40	10.30
3½.....	1.40	2.00	2.70	3.50	3.85	6.80	10.80
4.....	1.50	2.15	2.90	3.75	4.15	7.20	11.30
4½.....	1.60	2.30	3.10	4.00	4.45	7.60	11.80
5.....	1.70	2.45	3.30	4.25	4.75	8.00	12.30
5½.....	1.80	2.60	3.50	4.50	5.05	8.40	12.80
6.....	1.90	2.75	3.70	4.75	5.35	8.80	13.30
6½.....	2.75	3.65	4.65	5.75	6.40	9.20	13.80
7.....	2.85	3.80	4.85	6.00	6.70	9.60	14.30
7½.....	2.95	3.95	5.05	6.25	7.00	10.00	14.80
8.....	3.05	4.10	5.25	6.50	7.30	10.40	15.30
8½.....	3.15	4.25	5.45	6.75	7.60	10.80	15.80
9.....	3.25	4.40	5.65	7.00	7.90	11.20	16.30
9½.....	3.35	4.55	5.85	7.25	8.20	11.60	16.80
10.....	3.45	4.70	6.05	7.50	8.50	12.00	17.30
11.....	3.65	5.00	6.45	8.00	9.10	12.80	18.30
12.....	3.85	5.30	6.85	8.50	9.70	13.60	19.30
13.....	4.05	5.60	7.25	9.00	10.30	14.40	20.30
14.....	4.25	5.90	7.65	9.50	10.90	15.20	21.30
15.....	4.45	6.20	8.05	10.00	11.50	16.00	22.30
16.....	4.65	6.50	8.45	10.50	12.10	16.80	23.30
17.....	4.85	6.80	8.85	11.00	12.70	17.60	24.30
18.....	5.05	7.10	9.25	11.50	13.30	18.40	25.30
19.....	5.25	7.40	9.65	12.00	13.90	19.20	26.30
20.....	5.45	7.70	10.05	12.50	14.50	20.00	27.30

The following extras are understood as part of this list:
 Bolts without nuts, 10% extra discount.
 Bolts with hexagon nuts, add 15% to list price.
 Bolts with left hand threads, add 25% to list price.

Round neck carriage bolts, add 10% to list price.
 Intermediate lengths charged at price of next larger size.
 For $\frac{3}{8}$ inch diameter and larger, use machine bolt list and discount.

For Packing, see "Contents of Packages" at beginning of Bolt and Nut Section.

BOLTS AND NUTS—Cont'd

Approximate Weight in Pounds of 100 Common Carriage Bolts.

Length, Inches	$\frac{3}{16}$ Inch Diameter	$\frac{1}{4}$ Inch Diameter	$\frac{5}{16}$ Inch Diameter	$\frac{3}{8}$ Inch Diameter	$\frac{7}{16}$ Inch Diameter	$\frac{1}{2}$ Inch Diameter	$\frac{5}{8}$ Inch Diameter	$\frac{3}{4}$ Inch Diameter
1.....	1.9	2.8	4.8	7.3	10.5	14.4	30.	39.
1 $\frac{1}{4}$	2.2	3.1	5.2	8.	11.5	15.7	32.	42.
1 $\frac{1}{2}$	2.4	3.5	5.7	8.7	12.5	17.	34.	45.
2.....	2.9	4.2	6.7	10.1	16.5	19.6	36.	51.
2 $\frac{1}{2}$	3.3	4.9	7.7	11.5	18.5	22.2	40.	57.
3.....	3.7	5.6	8.7	13.	20.4	24.7	44.	63.
3 $\frac{1}{2}$	4.1	6.3	9.7	14.4	22.3	27.3	48.	69.
4.....	4.6	7.	10.6	15.8	24.2	29.8	52.	75.
4 $\frac{1}{2}$		7.7	11.6	17.2	26.2	32.4	56.	81.
5.....		8.4	12.6	18.6	28.1	34.9	60.	88.
5 $\frac{1}{2}$		9.1	13.6	20.	30.	37.5	64.	94.
6.....		9.8	14.5	21.5	32.	40.	68.	100.
6 $\frac{1}{2}$		10.5	15.5	22.9	34.	42.6	72.	106.
7.....		11.2	16.5	24.3	35.9	45.1	77.	112.
7 $\frac{1}{2}$		11.9	17.5	25.7	37.8	47.7	81.	118.
8.....		12.6	18.4	27.1	39.8	50.2	85.	124.
9.....		14.	20.4	30.	43.7	55.3	93.	136.
10.....		15.4	22.3	32.8	47.6	60.4	101.	148.
11.....		16.8	24.3	35.6	51.5	65.5	109.	160.
12.....		18.2	26.2	38.4	55.4	70.6	117.	172.
13.....				41.2	59.3	75.7	125.	184.
14.....				44.	63.2	80.8	133.	196.
15.....				47.	67.1	85.9	141.	208.
16.....				50.	71.	91.	150.	221.
17.....				53.	74.9	96.1	158.	233.
18.....				55.5	78.8	101.2	166.	245.
19.....				58.	82.7	106.3	174.	257.
20.....				61.	86.6	111.4	182.	269.

AUTOMOBILE BOLTS

All measured under the head



$\frac{7}{16}$ " Short
Demountable
Rim Bolt



$\frac{7}{16}$ " Long
Demountable
Rim Bolt



$\frac{7}{16}$ " Felloe
Bolt



$\frac{3}{8}$ " Hub Bolt
Knurl Neck



$\frac{3}{8}$ " Hub Bolt
Square Neck

The above bolts furnished in Black, Galvanized or Electro-Galvanized.

Put up in parcels of 100 bolts each.
Price quoted on application.



BOLTS AND NUTS—Cont'd

CARRIAGE BOLTS



Countersunk, measured over all



Black, Full Square, measured under the head

List Price per 100.

From this list the above bolts are sold at varying discounts.

Length, Inches	$\frac{3}{16}$ and $\frac{1}{4}$ Inch Diameter	$\frac{5}{16}$ Inch Diameter	$\frac{3}{8}$ Inch Diameter	$\frac{7}{16}$ Inch Diameter	$\frac{1}{2}$ Inch Diameter	$\frac{9}{16}$ and $\frac{5}{8}$ Inch Diameter
1.....	\$2.40	\$3.00	\$3.70	\$5.20	\$6.25	\$11.80
1 $\frac{1}{4}$	2.40	3.00	3.70	5.40	6.50	12.20
1 $\frac{1}{2}$	2.40	3.00	3.70	5.60	6.75	12.60
1 $\frac{3}{4}$	2.45	3.10	4.00	5.80	7.00	13.00
2.....	2.50	3.20	4.00	6.00	7.25	13.40
2 $\frac{1}{4}$	2.55	3.30	4.15	6.20	7.50	13.80
2 $\frac{1}{2}$	2.60	3.40	4.30	6.40	7.75	14.20
2 $\frac{3}{4}$	2.65	3.50	4.45	6.60	8.00	14.60
3.....	2.70	3.60	4.60	6.80	8.25	15.00
3 $\frac{1}{4}$	2.75	3.70	4.75	7.00	8.50	15.40
3 $\frac{1}{2}$	2.80	3.80	4.90	7.20	8.75	15.80
3 $\frac{3}{4}$	2.85	3.90	5.05	7.40	9.00	16.20
4.....	2.90	4.00	5.20	7.60	9.25	16.60
4 $\frac{1}{4}$	2.95	4.10	5.35	7.80	9.50	17.00
4 $\frac{1}{2}$	3.00	4.20	5.50	8.00	9.75	17.40
4 $\frac{3}{4}$	3.05	4.30	5.65	8.20	10.00	17.80
5.....	3.10	4.40	5.80	8.40	10.25	18.20
5 $\frac{1}{2}$	3.20	4.60	6.10	8.80	10.75	19.00
6.....	3.30	4.80	6.40	9.20	11.25	19.80
6 $\frac{1}{2}$		5.00	6.70	9.60	11.75	20.60
7.....		5.20	7.00	10.00	12.25	21.40
7 $\frac{1}{2}$		5.40	7.30	10.40	12.75	22.20
8.....		5.60	7.60	10.80	13.25	23.00
8 $\frac{1}{2}$		5.80	7.90	11.20	13.75	23.80
9.....		6.00	8.20	11.60	14.25	24.60
9 $\frac{1}{2}$			8.50	12.00	14.75	25.40
10.....			8.80	12.40	15.25	26.20
11.....				13.20	16.25	27.80
12.....				14.00	17.25	29.40
13.....				14.80	18.25	31.00
14.....					19.25	32.60
15.....					20.25	34.20
16.....					21.25	35.80

The following extras are understood as part of the above list:

Bolts without nuts, 10% extra discount.

Bolts with hexagon nuts, add 10% to list price.

Bolts with left hand threads add 25% to list price.

Intermediate lengths can also be furnished and are charged at price of next larger sizes.

For Packing, see "Contents of Packages" at beginning of Bolt and Nut Section.



BOLTS AND NUTS—Cont'd

STEP AND SHAFT BOLTS



Step



Shaft

Measured under
the Head

List Price per 100.

From this list the above Bolts are sold at varying discounts.

Length, Inches	$\frac{3}{16}$ and $\frac{1}{4}$ Inch Diameter	$\frac{5}{16}$ Inch Diameter	$\frac{3}{8}$ Inch Diameter	$\frac{7}{16}$ Inch Diameter	$\frac{1}{2}$ Inch Diameter	$\frac{9}{16}$ and $\frac{5}{8}$ Inch Diameter	$\frac{3}{4}$ Inch Diameter
1.....	\$3.00	\$4.00	\$5.40	\$7.30	\$9.50		
1 $\frac{1}{4}$	3.10	4.00	5.40	7.30	9.50		
1 $\frac{1}{2}$	3.20	4.00	5.40	7.30	9.50		
1 $\frac{3}{4}$	3.30	4.00	5.40	7.50	9.80		
2.....	3.40	4.10	5.40	7.70	10.10	\$16.75	
2 $\frac{1}{4}$	3.50	4.20	5.60	7.90	10.35	17.25	
2 $\frac{1}{2}$	3.60	4.40	5.80	8.15	10.65	17.75	
2 $\frac{3}{4}$	3.70	4.50	6.00	8.35	10.90	18.25	
3.....	3.80	4.70	6.20	8.55	11.20	18.75	\$21.50
3 $\frac{1}{4}$	3.90	4.90	6.50	8.75	11.50	19.25	22.35
3 $\frac{1}{2}$	4.00	5.00	6.70	8.95	11.75	19.75	23.25
3 $\frac{3}{4}$	4.10	5.20	6.90	9.15	12.00	20.25	24.50
4.....	4.20	5.30	7.10	9.40	12.30	20.75	25.00
4 $\frac{1}{4}$	4.35	5.50	7.30	9.60	12.60	21.25	26.85
4 $\frac{1}{2}$	4.50	5.70	7.50	9.80	12.90	21.75	27.80
4 $\frac{3}{4}$	4.65	5.85	7.70	10.00	13.15	22.25	28.30
5.....	4.80	6.00	7.90	10.25	13.45	22.75	28.75
5 $\frac{1}{2}$	5.10	6.30	8.40	10.65	14.00	23.75	30.50
6.....	5.40	6.60	8.80	11.05	14.55	24.75	32.50
6 $\frac{1}{2}$		7.00	9.30	11.50	15.10	25.75	33.50
7.....		7.30	9.70	11.85	15.70	26.75	36.25
7 $\frac{1}{2}$		7.60	10.10	12.35	16.25	27.75	38.00
8.....		7.90	10.50	12.75	16.80	28.75	40.00
8 $\frac{1}{2}$		8.20	10.90	13.15	17.35	29.75	42.00
9.....		8.50	11.40	13.60	17.90	30.75	43.75
9 $\frac{1}{2}$			11.90	14.00	18.50	31.75	45.75
10.....			12.40	14.45	19.00	32.75	47.50
10 $\frac{1}{2}$				14.85	19.60	33.75	49.30
11.....				15.25	20.15	34.75	51.25
11 $\frac{1}{2}$				15.70	20.70	35.75	53.00
12.....				16.15	21.30	36.75	55.00

The following extras are understood as part of the above list:

Bolts without nuts, 10% extra discount.

Bolts with hexagon nuts, add 10% to list price.

Bolts with left hand threads, add 25% to list price.

Intermediate lengths charged at price of next larger size.

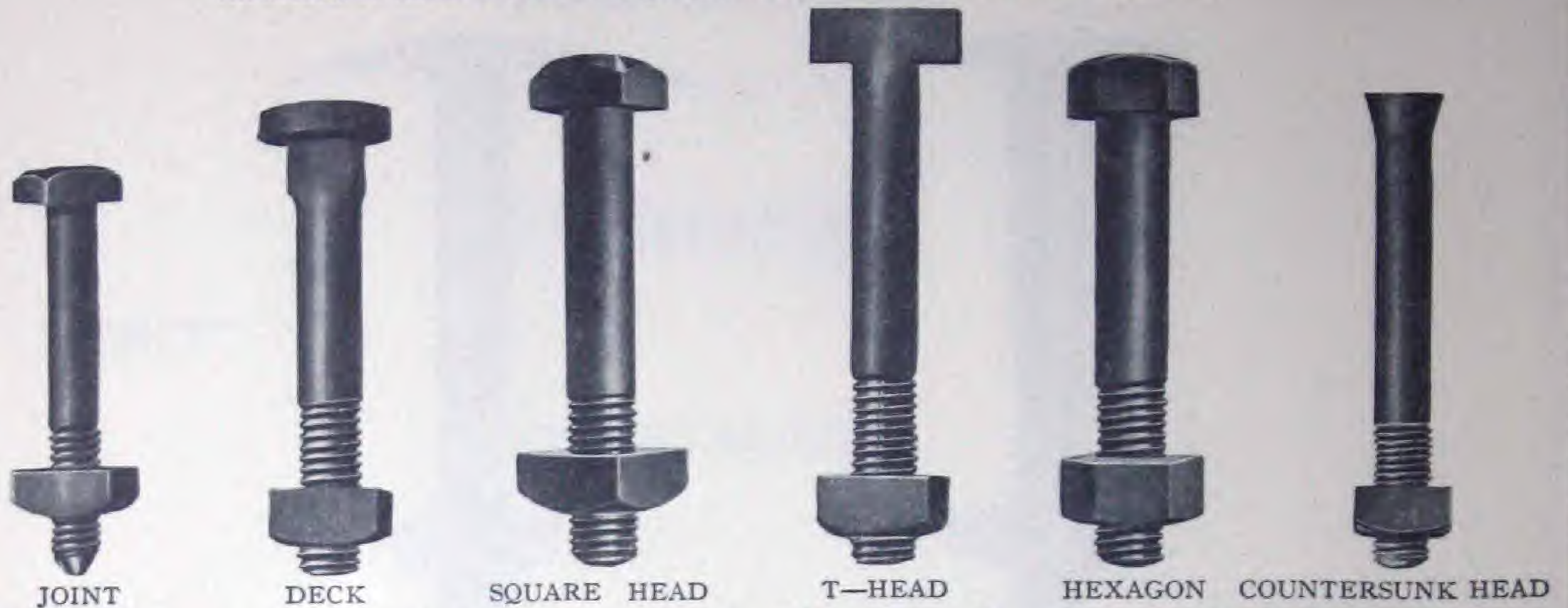
For Packing, see "Contents of Packages" at beginning of Bolt and Nut Section.



BOLTS AND NUTS—Cont'd

MACHINE BOLTS

All measured under the head except countersunk, which is measured over all.



List Price per 100.

From this list the above bolts are sold at varying discounts.

Adopted January 2, 1924.

Length Inches	1/4 Inch Diam.	5/16 Inch Diam.	3/8 Inch Diam.	7/16 Inch Diam.	1/2 Inch Diam.	9/16 & 5/8 Inch Diam.	3/4 Inch Diam.	7/8 Inch Diam.	1 Inch Diam.	1 1/8 Inch Diam.	1 1/4 Inch Diam.
1 1/2.....	\$1.70	\$2.00	\$2.40	\$3.00	\$3.70	\$5.50	\$7.70	\$10.50	\$15.10	\$22.50	\$30.00
2.....	1.80	2.15	2.60	3.25	4.00	5.90	8.25	11.20	16.00	23.70	31.50
2 1/2.....	1.90	2.30	2.80	3.50	4.30	6.30	8.80	11.90	16.90	24.90	33.00
3.....	2.00	2.45	3.00	3.75	4.60	6.70	9.35	12.60	17.80	26.10	34.50
3 1/2.....	2.10	2.60	3.20	4.00	4.90	7.10	9.90	13.30	18.70	27.30	36.00
4.....	2.20	2.75	3.40	4.25	5.20	7.50	10.45	14.00	19.60	28.50	37.50
4 1/2.....	2.30	2.90	3.60	4.50	5.50	7.90	11.00	14.70	20.50	29.70	39.00
5.....	2.40	3.05	3.80	4.75	5.80	8.30	11.55	15.40	21.40	30.90	40.50
5 1/2.....	2.50	3.20	4.00	5.00	6.10	8.70	12.10	16.10	22.30	32.10	42.00
6.....	2.60	3.35	4.20	5.25	6.40	9.10	12.65	16.80	23.20	33.30	43.50
6 1/2.....	3.70	4.50	5.40	6.50	7.70	9.50	13.20	17.50	24.10	34.50	45.00
7.....	3.80	4.65	5.60	6.75	8.00	9.90	13.75	18.20	25.00	35.70	46.50
7 1/2.....	3.90	4.80	5.80	7.00	8.30	10.30	14.30	18.90	25.90	36.90	48.00
8.....	4.00	4.95	6.00	7.25	8.60	10.70	14.85	19.60	26.80	38.10	49.50
9.....	4.20	5.25	6.40	7.75	9.20	11.50	15.95	21.00	28.60	40.50	52.50
10.....	4.40	5.55	6.80	8.25	9.80	12.30	17.05	22.40	30.40	42.90	55.50
11.....	4.60	5.85	7.20	8.75	10.40	13.10	18.15	23.80	32.20	45.30	58.50
12.....	4.80	6.15	7.60	9.25	11.00	13.90	19.25	25.20	34.00	47.70	61.50
13.....	5.00	6.45	8.00	9.75	11.60	14.70	20.35	26.60	35.80	50.10	64.50
14.....	5.20	6.75	8.40	10.25	12.20	15.50	21.45	28.00	37.60	52.50	67.50
15.....	5.40	7.05	8.80	10.75	12.80	16.30	22.55	29.40	39.40	54.90	70.50
16.....	5.60	7.35	9.20	11.25	13.40	17.10	23.65	30.80	41.20	57.30	73.50
17.....	5.80	7.65	9.60	11.75	14.00	17.90	24.75	32.20	43.00	59.70	76.50
18.....	6.00	7.95	10.00	12.25	14.60	18.70	25.85	33.60	44.80	62.10	79.50
19.....	6.20	8.25	10.40	12.75	15.20	19.50	26.95	35.00	46.60	64.50	82.50
20.....	6.40	8.55	10.80	13.25	15.80	20.30	28.05	36.40	48.40	66.90	85.50
21.....	6.60	8.85	11.20	13.75	16.40	21.10	29.15	37.80	50.20	69.30	88.50
22.....	6.80	9.15	11.60	14.25	17.00	21.90	30.25	39.20	52.00	71.70	91.50
23.....	7.00	9.45	12.00	14.75	17.60	22.70	31.35	40.60	53.80	74.10	94.50
24.....	7.20	9.75	12.40	15.25	18.20	23.50	32.45	42.00	55.60	76.50	97.50
25.....	7.40	10.05	12.80	15.75	18.80	24.30	33.55	43.40	57.40	78.90	100.50
26.....	7.60	10.35	13.20	16.25	19.40	25.10	34.65	44.80	59.20	81.30	103.50
27.....	7.80	10.65	13.60	16.75	20.00	25.90	35.75	46.20	61.00	83.70	106.50
28.....	8.00	10.95	14.00	17.25	20.60	26.70	36.85	47.60	62.80	86.10	109.50
29.....	8.20	11.25	14.40	17.75	21.20	27.50	37.95	49.00	64.60	88.50	112.50
30.....	8.40	11.55	14.80	18.25	21.80	28.30	39.05	50.40	66.40	90.90	115.50
Add per inch.....	\$0.20	\$0.30	\$0.40	\$0.50	\$0.60	\$0.80	\$1.10	\$1.40	\$1.80	\$2.40	\$3.00

Bolts 6 inches and shorter without nuts, 10% additional discount.

Bolts longer than 6 inches without nuts, 5% additional discount.

Bolts with our standard hexagon nuts, add 10% to list price.

Bolts with U.S. standard square nuts, add 5% to list price.

Bolts with U.S. standard hexagon nuts, add 15% to list price.

Bolts with hexagon heads, add 10% to list price.

Bolts with U.S. standard square heads, add 25% to list price.

Bolts with U.S. standard hexagon heads, add 20% to list price.

Tee head Bolts, add 50% to list price.

Bolts with askew heads, add 10% to list price.

Joint Bolts will be sent with square nuts unless otherwise specified.

Joint bolts with square nuts, add 10% to list price.

Joint bolts with oblong nuts, add 20% to list price.

Countersunk head bolts, add 25% to list price.

Bolts with square neck, add 25% to list price.

Bolts with cotter pin holes, add 25% to list price.

Bolts with left hand threads, add 25% to list price.

Intermediate lengths charged at price of next larger size.

Special bolts with irregular threads and unusual dimensions of heads or nuts will be charged extra at discretion of the manufacturer.

The above extras apply to bolts when ordered in quantity only. Small lots will be charged at special prices.

For packing see "Contents of Packages" at beginning of Bolt and Nut Section.



BOLTS AND NUTS—Cont'd

MACHINE BOLTS

Approximate Weight in Pounds of 100 Square Head Machine Bolts with Square Nuts.

Diameter.....	$\frac{1}{4}$ Inch	$\frac{5}{16}$ Inch	$\frac{3}{8}$ Inch	$\frac{7}{16}$ Inch	$\frac{1}{2}$ Inch	$\frac{5}{8}$ Inch	$\frac{3}{4}$ Inch	$\frac{7}{8}$ Inch	1 Inch	$1\frac{1}{8}$ Inch	$1\frac{1}{4}$ Inch
Length, Inches	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
1½.....	3.6	6.2	8.8	13	18	33	52	78	114	165	225
2.....	4.2	7.2	10.2	15	21	37	58	86	125	178	242
2½.....	4.8	8.2	11.6	17	24	41	64	94	136	191	259
3.....	5.4	9.1	13.	19	26	45	70	103	146	205	275
3½.....	6.	10.1	14.4	21	29	49	76	111	157	219	292
4.....	6.6	11.	15.8	23	31	53	82	119	167	232	308
4½.....	7.2	12.	17.2	25	34	57	88	128	178	246	325
5.....	7.8	12.9	18.6	27	37	61	94	136	189	259	342
5½.....	8.4	13.9	20.	29	39	65	100	144	199	273	359
6.....	9.	14.8	21.4	31	42	69	106	152	210	286	375
6½.....	9.6	15.8	22.8	33	44	73	112	161	220	300	392
7.....	10.2	16.7	24.2	35	47	77	118	169	231	313	409
7½.....	10.8	17.7	25.6	37	50	81	124	177	242	327	425
8.....	11.4	18.6	27.	39	52	85	130	186	252	340	442
9.....	12.6	20.5	29.8	43	57	93	142	200	273	367	475
10.....	13.8	22.4	32.6	47	63	101	154	217	295	394	509
11.....	15.	24.3	35.4	51	68	109	166	233	316	421	542
12.....	16.2	26.2	38.2	55	73	118	178	250	338	448	575
13.....	17.4	28.1	41.	59	78	126	190	267	358	475	609
14.....	18.6	30.	43.8	63	83	134	202	283	379	502	642
15.....	19.8	31.9	46.6	67	89	142	214	300	401	529	675
16.....	21.	33.8	49.4	71	94	150	226	316	422	556	708
17.....	22.2	35.7	52.2	75	99	158	238	333	443	583	742
18.....	23.4	37.6	55.	79	104	166	250	350	464	610	775
19.....	24.6	39.5	57.8	83	109	175	262	366	485	637	808
20.....	25.8	41.4	60.6	87	115	183	274	383	507	664	842
21.....					120	191	286	399	528	691	875
22.....					125	199	298	416	549	718	908
23.....					130	207	310	433	570	745	942
24.....					135	215	322	449	591	772	975
25.....					140	223	334	466	613	799	1008
26.....					145	231	346	482	634	826	1041
27.....					150	239	358	499	655	853	1075
28.....					155	247	370	516	676	880	1108
29.....					160	255	382	532	697	907	1141
30.....					165	263	394	550	719	934	1175

The above weights are for bolts with bolt size nuts, and with heads of diameter equal to $1\frac{1}{2}$ times diameter of Bolt, and thickness equal to $\frac{3}{4}$ times diameter of Bolt. For weights of Bolts with hexagon heads or nuts, add or subtract as follows per 100.

With Hexagon Nut..	.2	.25	.3	.4	.55	1.1	1.75	2.60	3.5	—7.5	—12.2
With Hexagon Head and Nut.....	1.1	1.48	1.9	2.6	3.45	5.2	6.9	8.55	10.9	—4.8	—11.3



BOLTS AND NUTS—Cont'd

BOLT ENDS WITH SQUARE NUTS



Diameter of Bolt, Inches	Length, Inches	List Price Per Pound	Weight Per 100	Length of Thread, Inches	Diameter of Bolt, Inches	Length, Inches	List Price Per Pound	Weight Per 100	Length of Thread, Inches
$\frac{3}{16}$	6	\$0.32	5		$1\frac{1}{8}$	13	\$0.10	445	$4\frac{1}{2}$
$\frac{1}{4}$	6	.25	9		$1\frac{3}{4}$	14	.11	644	$4\frac{1}{2}$
$\frac{5}{16}$	6	.20	14	2	$1\frac{3}{8}$	15	.11	865	5
$\frac{3}{8}$	7	.18	24	2	$1\frac{1}{2}$	16	.11	1,075	5
$\frac{7}{16}$	7	.16	34	$2\frac{1}{2}$	$1\frac{5}{8}$	17	.12	1,350	$5\frac{1}{2}$
$\frac{1}{2}$	8	.14	49	3	$1\frac{3}{4}$	18	.12	1,670	$5\frac{1}{2}$
$\frac{9}{16}$	8	.14			$1\frac{7}{8}$	19	.12	1,900	6
$\frac{5}{8}$	9	.12	84	$3\frac{1}{2}$	2.....	20	.12	2,400	6
$\frac{3}{4}$	10	.10	145	$3\frac{1}{2}$	$2\frac{1}{4}$	22	.14	3,150	$6\frac{1}{2}$
$\frac{7}{8}$	11	.10	210	4	$2\frac{1}{2}$	24	.14	4,200	$6\frac{1}{2}$
1.....	12	.10	300	4	$2\frac{3}{4}$	24	.16	5,100	7
					3.....	26	.18	6,400	$7\frac{1}{2}$

The following extras are understood as part of the above list.

Bolt Ends with hexagon nuts add 10% to the list price.

Bolt Ends with left hand threads add 25% to list price.

Bolt Ends shorter than the above standard lengths will be charged at the list of Machine Bolts of the same size.

CANT DOG BOLTS

With Square Head and Nut



Length under the Head, Inches	Diameter $\frac{3}{8}$ Inch	Diameter $\frac{7}{16}$ Inch	Diameter $\frac{1}{2}$ Inch
$1\frac{1}{2}$	\$2.40	\$2.80	\$3.60
$1\frac{5}{8}$	2.56	3.00	3.86
$1\frac{3}{4}$	2.56	3.00	3.86
2.....	2.56	3.00	3.86



BOLTS AND NUTS—Cont'd

BLANK BOLTS With Square Heads



List Price per 100

Adopted January 2, 1924

Length Under the Head Inches	$\frac{1}{4}$ Inch Diam.	$\frac{5}{16}$ Inch Diam.	$\frac{3}{8}$ Inch Diam.	$\frac{7}{16}$ Inch Diam.	$\frac{1}{2}$ Inch Diam.	$\frac{9}{16}$ and $\frac{5}{8}$ Inch Diam.	$\frac{3}{4}$ Inch Diam.	$\frac{7}{8}$ Inch Diam.	1 Inch Diam.	$1\frac{1}{8}$ Inch Diam.	$1\frac{1}{4}$ Inch Diam.
1½.....	\$1.20	\$1.40	\$1.60	\$2.00	\$2.50	\$4.30	\$6.10	\$7.80	\$10.40	\$16.00	\$21.60
2.....	1.30	1.55	1.80	2.25	2.80	4.70	6.65	8.50	11.30	17.20	23.10
2½.....	1.40	1.70	2.00	2.50	3.10	5.10	7.20	9.20	12.20	18.40	24.60
3.....	1.50	1.85	2.20	2.75	3.40	5.50	7.75	9.90	13.10	19.60	26.10
3½.....	1.60	2.00	2.40	3.00	3.70	5.90	8.30	10.60	14.00	20.80	27.60
4.....	1.70	2.15	2.60	3.25	4.00	6.30	8.85	11.30	14.90	22.00	29.10
4½.....	1.80	2.30	2.80	3.50	4.30	6.70	9.40	12.00	15.80	23.20	30.60
5.....	1.90	2.45	3.00	3.75	4.60	7.10	9.95	12.70	16.70	24.40	32.10
5½.....	2.00	2.60	3.20	4.00	4.90	7.50	10.50	13.40	17.60	25.60	33.60
6.....	2.10	2.75	3.40	4.25	5.20	7.90	11.05	14.10	18.50	26.80	35.10
6½.....	3.20	3.90	4.60	5.50	6.50	8.30	11.60	14.80	19.40	28.00	36.60
7.....	3.30	4.05	4.80	5.75	6.80	8.70	12.15	15.50	20.30	29.20	38.10
7½.....	3.40	4.20	5.00	6.00	7.10	9.10	12.70	16.20	21.20	30.40	39.60
8.....	3.50	4.35	5.20	6.25	7.40	9.50	13.25	16.90	22.10	31.60	41.10
9.....	3.70	4.65	5.60	6.75	8.00	10.30	14.35	18.30	23.90	34.00	44.10
10.....	3.90	4.95	6.00	7.25	8.60	11.10	15.45	19.70	25.70	36.40	47.10
11.....	4.10	5.25	6.40	7.75	9.20	11.90	16.55	21.10	27.50	38.80	50.10
12.....	4.30	5.55	6.80	8.25	9.80	12.70	17.65	22.50	29.30	41.20	53.10
13.....			7.20	8.75	10.40	13.50	18.75	23.90	31.10	43.60	56.10
14.....			7.60	9.25	11.00	14.30	19.85	25.30	32.90	46.00	59.10
15.....			8.00	9.75	11.60	15.10	20.95	26.70	34.70	48.40	62.10
16.....			8.40	10.25	12.20	15.90	22.05	28.10	36.50	50.80	65.10
17.....					12.80	16.70	23.15	29.50	38.30	53.20	68.10
18.....					13.40	17.50	24.25	30.90	40.10	55.60	71.10
19.....					14.00	18.30	25.35	32.30	41.90	58.00	74.10
20.....					14.60	19.10	26.45	33.70	43.70	60.40	77.10

The following extras are understood as a part of this list:

Blank bolts with hexagon heads, 10% extra.

Blank bolts with tee, askew, or eccentric heads, price on application.

Intermediate lengths take next higher list.



BOLTS AND NUTS—Cont'd

BLANK BOLTS

With square heads

Approximate Weight in Pounds of 100 Blank Bolts with Square Heads.

Length Under the Head, Inches	Diam. $\frac{3}{8}$ Inch, Pounds	Diam. $\frac{7}{16}$ Inch, Pounds	Diam. $\frac{1}{2}$ Inch, Pounds	Diam. $\frac{5}{8}$ Inch, Pounds	Diam. $\frac{3}{4}$ Inch, Pounds	Diam. $\frac{7}{8}$ Inch, Pounds	Diam. 1 Inch, Pounds	Diam. $1\frac{1}{4}$ Inch, Pounds	Diam. $1\frac{1}{2}$ Inch, Pounds
1.....	6.4	9.7	12.6	23.0					
$1\frac{1}{4}$	7.2	10.7	14.0	24.9	39.5				
$1\frac{1}{2}$	8.0	11.7	15.4	27.1	42.5	63.0			
$1\frac{3}{4}$	8.8	12.7	16.8	29.0	45.5	67.0	90		
2.....	9.6	13.7	18.2	31.0	48.5	71.0	95		
$2\frac{1}{4}$	10.4	14.7	19.6	33.0	51.5	75.2	100		
$2\frac{1}{2}$	11.2	15.7	21.0	35.0	54.5	79.4	105		
$2\frac{3}{4}$	12.0	16.7	22.4	37.0	57.5	83.7	110		
3.....	12.8	17.7	23.8	39.0	60.5	88.0	115	215	370
$3\frac{1}{2}$	14.4	19.7	26.6	43.5	66.5	96.3	125	232	392
4.....	16.0	21.7	29.4	48.0	72.7	104.5	136	249	414
$4\frac{1}{2}$	17.5	23.7	31.2	52.5	78.9	112.8	147	266	437
5.....	19.0	25.7	35.0	56.5	85.1	121.0	158	283	461
$5\frac{1}{2}$	20.5	27.7	37.8	60.5	91.3	129.3	169	300	485
6.....	22.0	29.7	40.6	64.6	97.5	137.5	180	317	510
7.....	25.0	33.7	46.0	72.8	109.0	154.0	202	351	560
8.....	28.0	37.7	51.5	81.0	121.0	171.0	223	386	610
9.....		41.7	56.7	89.0	133.0	188.0	245	420	660
10.....		45.7	62.0	97.0	145.0	205.0	267	453	710
11.....			67.5	105.0	157.0	222.0	288	488	760
12.....			73.0	114.0	170.0	239.0	310	523	810
13.....			78.5	123.0	183.0	256.0	332	558	860
14.....			84.0	132.0	196.0	273.0	354	593	910
15.....			89.5	141.0	209.0	290.0	376	628	960
16.....			95.0	150.0	222.0	307.0	398	663	1,010
17.....			100.5	159.0	235.0	324.0	420	698	1,060
18.....			106.0	168.0	248.0	341.0	442	733	1,110
19.....			111.5	177.0	261.0	358.0	464	768	1,160
20.....			117.0	186.0	274.0	375.0	486	803	1,210
Add per Inch.....	3.0	4.0	5.5	9.0	13.0	17.0	22.0	35.0	50.0



BOLTS AND NUTS—Cont'd

STUD BOLTS



List Price per 100.

No. of Threads to the Inch	16	14	13	12	11	10	9	8	7	7
Length, Inches	$\frac{3}{8}$ Inch Diam.	$\frac{7}{16}$ Inch Diam.	$\frac{1}{2}$ Inch Diam.	$\frac{9}{16}$ Inch Diam.	$\frac{5}{8}$ Inch Diam.	$\frac{3}{4}$ Inch Diam.	$\frac{7}{8}$ Inch Diam.	1 Inch Diam.	$1\frac{1}{8}$ Inch Diam.	$1\frac{1}{4}$ Inch Diam.
$1\frac{1}{2}$	\$4.00	\$5.10	\$5.50							
$1\frac{3}{4}$	4.10	5.25	5.65							
2.....	4.20	5.40	5.80	\$8.50	\$8.50	\$12.40				
$2\frac{1}{4}$	4.30	5.55	5.95	8.75	8.75	12.70				
$2\frac{1}{2}$	4.40	5.70	6.10	9.00	9.00	13.00	\$18.00			
$2\frac{3}{4}$	4.50	5.85	6.25	9.25	9.25	13.30	18.50			
3.....	4.60	6.00	6.40	9.50	9.50	13.60	19.00	\$27.80		
$3\frac{1}{4}$	4.70	6.15	6.55	9.75	9.75	13.90	19.50	28.40		
$3\frac{1}{2}$	4.80	6.30	6.70	10.00	10.00	14.20	20.00	29.00		
$3\frac{3}{4}$	4.90	6.45	6.85	10.25	10.25	14.50	20.50	29.60		
4.....	5.00	6.60	7.00	10.50	10.50	14.80	21.00	30.20	\$45.00	\$64.00
$4\frac{1}{2}$	5.25	6.90	7.30	11.00	11.00	15.40	22.00	31.40	46.50	66.50
5.....	6.00	7.60	7.60	11.50	11.50	16.00	23.00	32.60	48.00	69.00
$5\frac{1}{2}$	7.25	8.00	8.00	12.00	12.00	16.60	24.00	33.80	49.50	71.50
6.....	8.00	8.45	8.45	12.50	12.50	17.20	25.00	35.00	51.00	74.00
7.....				13.60	13.60	18.60	27.00	37.50	54.00	79.50
8.....				14.80	14.80	20.10	29.10	40.10	58.00	85.00
9.....						21.60	31.20	42.80	62.50	90.50
10.....						23.20	33.40	45.50	67.00	96.00

List prices above include one hexagon nut.

Studs without Nuts will be charged at a reduction of 15 per cent. from list prices.

Studs ordered with two nuts will be charged an extra 15 per cent. for the additional nut.

When ordering give length of thread required on each end and also state the length of part not threaded.



BOLTS AND NUTS—Cont'd

COACH OR LAG SCREWS



Lag Screw

Gimlet Point
Coach Screw

Fetter Drive Screw

Price List per 100 with Square Heads.

Adopted January 2, 1924.

Length Under the Head Inches	$\frac{1}{4}$ and $\frac{5}{16}$ Inch Diam.	$\frac{3}{8}$ Inch Diam.	$\frac{7}{16}$ Inch Diam.	$\frac{1}{2}$ Inch Diam.	$\frac{9}{16}$ and $\frac{5}{8}$ Inch Diam.	$\frac{3}{4}$ Inch Diam.	$\frac{7}{8}$ Inch Diam.	1 Inch Diam.
1½.....	\$2.25	\$2.70	\$3.15	\$3.75				
2.....	2.45	3.00	3.50	4.15	\$6.00			
2½.....	2.65	3.30	3.85	4.55	6.50	\$9.20		
3.....	2.85	3.60	4.20	4.95	7.00	9.90	\$15.00	
3½.....	3.05	3.90	4.55	5.35	7.50	10.60	16.00	\$22.00
4.....	3.25	4.20	4.90	5.75	8.00	11.30	17.00	23.30
4½.....	3.45	4.50	5.25	6.15	8.50	12.00	18.00	24.60
5.....	3.65	4.80	5.60	6.55	9.00	12.70	19.00	25.90
5½.....	3.85	5.10	5.95	6.95	9.50	13.40	20.00	27.20
6.....	4.05	5.40	6.30	7.35	10.00	14.10	21.00	28.50
6½.....	5.25	6.70	7.65	8.75	10.50	14.80	22.00	29.80
7.....	5.45	7.00	8.00	9.15	11.00	15.50	23.00	31.10
7½.....	5.65	7.30	8.35	9.55	11.50	16.20	24.00	32.40
8.....	5.85	7.60	8.70	9.95	12.00	16.90	25.00	33.70
9.....	6.25	8.20	9.40	10.75	13.00	18.30	27.00	36.30
10.....	6.65	8.80	10.10	11.55	14.00	19.70	29.00	38.90
11.....				12.35	15.00	21.10	31.00	41.50
12.....				13.15	16.00	22.50	33.00	44.10

The following extras are understood as part of this list:

Hexagon heads, 10% extra.

Tee heads, 20% extra.

Skein screws, list price, same as lag screws.

Length of thread is approximately three-fifths of length of screw.

Intermediate lengths take next higher list.

For Packing see "Contents of Packages" at beginning of Bolt and Nut Section.



BOLTS AND NUTS—Cont'd

COACH OR LAG SCREWS

NUMBER OF THREADS PER INCH

Matching the Threads of Expansion Bolt Shields

Diameter in Inches.	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1
Threads per Inch.	10	9	7	7	6	6	5	$4\frac{1}{2}$	4	$3\frac{1}{2}$

APPROXIMATE WEIGHT IN POUNDS OF 100 COACH SCREWS WITH SQUARE HEADS

Length Under the Head, Inches	$\frac{1}{4}$ Inch Diam.	$\frac{5}{16}$ Inch Diam.	$\frac{3}{8}$ Inch Diam.	$\frac{7}{16}$ Inch Diam.	$\frac{1}{2}$ Inch Diam.	$\frac{9}{16}$ Inch Diam.	$\frac{5}{8}$ Inch Diam.	$\frac{3}{4}$ Inch Diam.	$\frac{7}{8}$ Inch Diam.	1 Inch Diam.
$1\frac{1}{2}$	2.7	3.5	5.8	9.1						
2	3.5	4.4	7.1	11.0	15.0	22.8	26.3			
$2\frac{1}{2}$	4.2	5.3	8.5	12.9	17.3	25.3	29.9			
3	4.7	6.2	9.8	14.8	19.5	27.8	33.5	46.1	71.8	103.0
$3\frac{1}{2}$	5.2	7.1	11.1	16.5	21.6	30.4	37.1	51.5	78.5	112.0
4	5.7	8.0	12.5	18.2	23.8	33.0	40.7	57.1	85.3	121.0
$4\frac{1}{2}$	6.5	9.0	13.8	19.9	26.3	35.5	44.5	62.9	92.0	130.0
5	7.0	10.0	14.9	21.8	28.8	38.0	48.3	68.8	98.6	141.0
$5\frac{1}{2}$	7.5	11.0	16.0	23.5	31.3	40.7	52.0	74.7	105.3	153.0
6	8.0	12.0	17.2	25.2	33.8	43.3	55.7	80.5	112.0	164.0
7					38.9	50.0	63.2	92.3	125.4	185.0
8					44.0	56.8	69.3	104.0	138.8	205.0
9					48.5	63.5	76.4	115.4	156.3	225.0
10					53.0	70.3	83.5	126.8	173.8	245.0
11					57.5	77.0	90.6	138.2	191.3	265.0
12					62.0	83.7	97.8	149.5	208.8	285.0



HANGER OR TABLE BOLTS WITH GIMLET POINTS

Standard sizes regularly carried in stock:—

$\frac{1}{4}$ " diam.	x 2" to 6" long	advancing by $\frac{1}{2}$ "
$\frac{5}{16}$ "	x 2" " 6" "	" $\frac{1}{2}$ "
$\frac{3}{8}$ "	x 2" " 8" "	" $\frac{1}{2}$ "
$\frac{7}{16}$ "	x 2" " 8" "	" $\frac{1}{2}$ "
$\frac{1}{2}$ "	x 9" " "	"
$\frac{1}{2}$ "	x 2" " 8" "	" $\frac{1}{2}$ "
$\frac{1}{2}$ "	x 9" and 10" long.	
$\frac{5}{8}$ "	x 2" to 8" long	advancing by $\frac{1}{2}$ "
$\frac{5}{8}$ "	x 9" " 12" "	" 1"
$\frac{3}{4}$ "	x $2\frac{1}{2}$ " " 8" "	" $\frac{1}{2}$ "
$\frac{3}{4}$ "	x 9" " 12" "	" 1"
$\frac{7}{8}$ "	x $3\frac{1}{2}$ " " 8" "	" $\frac{1}{2}$ "
$\frac{7}{8}$ "	x 9" " 12" "	" 1"
1"	x 5" " 8" "	" $\frac{1}{2}$ "
1"	x 9" " 12" "	" 1"

The length of a Hanger Bolt is measured overall.

Prices on application.





BOLTS AND NUTS—Cont'd

PLOW AND CULTIVATOR BOLTS WITH SQUARE NUTS



No. 1

No. 2

No. 3

No. 4

No. 5



No. 6

No. 7

No. 8

No. 9

No. 10

List Price per 100

Length Over All, Inches	$\frac{5}{16}$ Inch Diameter	$\frac{3}{8}$ Inch Diameter	$\frac{7}{16}$ Inch Diameter	$\frac{1}{2}$ Inch Diameter	$\frac{9}{16}$ Inch Diameter	$\frac{5}{8}$ Inch Diameter
$1\frac{1}{4}$	\$1.70	\$2.00	\$2.60	\$3.50	\$4.50	\$5.70
$1\frac{1}{2}$	1.80	2.10	2.75	3.70	4.75	6.00
$1\frac{3}{4}$	1.90	2.20	2.90	3.90	5.00	6.30
2.....	2.00	2.30	3.05	4.10	5.25	6.60
$2\frac{1}{4}$	2.10	2.40	3.20	4.30	5.50	6.90
$2\frac{1}{2}$	2.20	2.50	3.35	4.50	5.75	7.20
$2\frac{3}{4}$	2.30	2.60	3.50	4.70	6.00	7.50
3.....	2.40	2.70	3.65	4.90	6.25	7.80
$3\frac{1}{4}$	2.50	2.80	3.80	5.10	6.50	8.10
$3\frac{1}{2}$	2.60	2.90	3.95	5.30	6.75	8.40
$3\frac{3}{4}$	2.70	3.00	4.10	5.50	7.00	8.70
4.....	2.80	3.10	4.25	5.70	7.25	9.00
$4\frac{1}{4}$	2.90	3.20	4.40	5.90	7.50	9.30
$4\frac{1}{2}$	3.00	3.30	4.55	6.10	7.75	9.60
$4\frac{3}{4}$	3.10	3.40	4.70	6.30	8.00	9.90
5.....	3.20	3.50	4.85	6.50	8.25	10.20
$5\frac{1}{4}$	3.30	3.60	5.00	6.70	8.50	10.50
$5\frac{1}{2}$	3.40	3.70	5.15	6.90	8.75	10.80
$5\frac{3}{4}$	3.50	3.80	5.30	7.10	9.00	11.10
6.....	3.60	3.90	5.45	7.30	9.25	11.40

Order by number and state whether right or left hand threads, otherwise RIGHT HAND threads will be sent.
Left Hand Threads, add 10% to list price.

Hexagon Nuts, add 10% to list price.

Styles Nos. 1, 2, 3 and 4 are carried in stock; Nos. 5 to 10 will be made to order promptly.

For Packing see "Contents of Packages" at beginning of Bolt and Nut Section.



BOLTS AND NUTS—Cont'd

PLOW AND CULTIVATOR BOLTS

Approximate weight in pounds of 100 Bolts with Nuts

No. 1 Key Head					No. 2 Round Countersunk Head				
Size	$\frac{5}{16}$ Inch	$\frac{3}{8}$ Inch	$\frac{7}{16}$ Inch	$\frac{1}{2}$ Inch	Size	$\frac{5}{16}$ Inch	$\frac{3}{8}$ Inch	$\frac{7}{16}$ Inch	$\frac{1}{2}$ Inch
$\frac{3}{4}$	3.74	6.25	.....	.....	$\frac{3}{4}$	3.81	6.06	8.25	.....
1.....	4.37	7.	9.37	14.	1.....	4.37	7.	9.19	13.18
$1\frac{1}{4}$	5.	7.87	10.56	14.75	$1\frac{1}{4}$	5.	7.56	10.	14.56
$1\frac{1}{2}$	5.62	8.62	11.31	15.75	$1\frac{1}{2}$	5.5	8.25	11.19	15.75
$1\frac{3}{4}$	6.	9.25	12.44	17.5	$1\frac{3}{4}$	6.12	9.	12.12	17.18
2.....	6.44	10.	13.5	18.56	2.....	6.68	9.81	13.5	18.37
$2\frac{1}{4}$	6.87	10.62	14.31	20.5	$2\frac{1}{4}$	7.12	10.62	14.37	20.18
$2\frac{1}{2}$	7.5	11.44	16.25	21.5	$2\frac{1}{2}$	7.62	11.31	15.56	21.62
$2\frac{3}{4}$	8.	12.5	17.	22.75	$2\frac{3}{4}$	8.	12.18	16.43	22.37
3.....	8.44	13.	18.	24.25	3.....	8.5	13.	17.81	24.

No. 3 Round Countersunk Square Neck					No. 4 Square Countersunk Head				
Size	$\frac{5}{16}$ Inch	$\frac{3}{8}$ Inch	$\frac{7}{16}$ Inch	$\frac{1}{2}$ Inch	Size	$\frac{5}{16}$ Inch	$\frac{3}{8}$ Inch	$\frac{7}{16}$ Inch	$\frac{1}{2}$ Inch
$\frac{3}{4}$	3.81	6.12	.....	.....	$\frac{3}{4}$	3.94	6.75	.....	.....
1.....	4.31	6.87	10.	14.37	1.....	4.37	7.31	10.44	.....
$1\frac{1}{4}$	4.87	7.5	11.12	15.31	$1\frac{1}{4}$	5.	7.87	10.81	15.5
$1\frac{1}{2}$	5.12	8.75	12.5	16.68	$1\frac{1}{2}$	5.5	8.87	12.	16.56
$1\frac{3}{4}$	5.87	9.37	13.56	18.43	$1\frac{3}{4}$	6.18	9.87	13.12	17.81
2.....	6.06	10.25	14.18	19.62	2.....	6.68	10.38	13.75	19.62
$2\frac{1}{4}$	6.94	11.	15.37	21.	$2\frac{1}{4}$	7.31	11.	14.81	20.62
$2\frac{1}{2}$	7.56	11.75	16.62	22.5	$2\frac{1}{2}$	7.75	12.18	16.	22.12
$2\frac{3}{4}$	8.	12.5	17.5	23.25	$2\frac{3}{4}$	8.37	12.75	16.56	23.25
3.....	8.5	13.18	18.68	25.25	3.....	9.12	13.56	17.56	23.87

SLEIGH SHOE AND TIRE BOLTS

Approximate weight in pounds of 100 Bolts with Nuts

Length overall in Inches	$\frac{3}{16}$ Inch, Diam.	$\frac{1}{4}$ Inch, Diam.	$\frac{5}{16}$ Inch, Diam.
1	1.19	1.79	.....
$1\frac{1}{4}$	1.39	2.04	3.12
$1\frac{1}{2}$	1.50	2.27	3.45
$1\frac{3}{4}$	1.75	2.50	3.84
2	1.92	2.72	4.17
$2\frac{1}{4}$	2.04	2.94	4.54
$2\frac{1}{2}$	2.22	3.12	5.00
$2\frac{3}{4}$	2.38	3.33	5.55
3	2.56	3.57	6.25



BOLTS AND NUTS—Cont'd

SLEIGH SHOE BOLTS



List Price per 100.

Adopted January 2, 1924.

Length Over All Inches	$\frac{3}{16}$ and $\frac{1}{4}$ Inch Diameter	$\frac{5}{16}$ Inch Diameter	$\frac{3}{8}$ Inch Diameter	$\frac{7}{16}$ Inch Diameter	$\frac{1}{2}$ Inch Diameter	$\frac{9}{16}$ and $\frac{5}{8}$ Inch Diameter	$\frac{3}{4}$ Inch Diameter
$1\frac{1}{2}$	\$1.00	\$1.40	\$1.90	\$2.50			
2.....	1.10	1.55	2.10	2.75			
$2\frac{1}{2}$	1.20	1.70	2.30	3.00	\$3.25	\$6.00	\$9.80
3.....	1.30	1.85	2.50	3.25	3.55	6.40	10.30
$3\frac{1}{2}$	1.40	2.00	2.70	3.50	3.85	6.80	10.80
4.....	1.50	2.15	2.90	3.75	4.15	7.20	11.30
$4\frac{1}{2}$	1.60	2.30	3.10	4.00	4.45	7.60	11.80
5.....	1.70	2.45	3.30	4.25	4.75	8.00	12.30
$5\frac{1}{2}$	1.80	2.60	3.50	4.50	5.05	8.40	12.80
6.....	1.90	2.75	3.70	4.75	5.35	8.80	13.30
$6\frac{1}{2}$	2.75	3.65	4.65	5.75	6.40	9.20	13.80
7.....	2.85	3.80	4.85	6.00	6.70	9.60	14.30
$7\frac{1}{2}$	2.95	3.95	5.05	6.25	7.00	10.00	14.80
8.....	3.05	4.10	5.25	6.50	7.30	10.40	15.30
$8\frac{1}{2}$	3.15	4.25	5.45	6.75	7.60	10.80	15.80
9.....	3.25	4.40	5.65	7.00	7.90	11.20	16.30

The following extras are understood as part of this list:
 Bolts with hexagon nuts, add 15% to list price.
 Bolts with left-hand threads, add 25% to list price.
 Intermediate lengths charged at price of next larger size.
 Sleigh and Special Sleigh Shoe Bolts sell off this list.

For Packing, see "Contents of Packages" at beginning of Bolt and Nut Section.

TIRE BOLTS



List Price per 100, Plain or Fluted.

Length Over All, Inches	$\frac{1}{8}$ & $\frac{3}{16}$ Inch Diam.	$\frac{1}{4}$ Inch Diam.	$\frac{5}{16}$ Inch Diam.	$\frac{3}{8}$ Inch Diam.	Length Over All, Inches	$\frac{1}{8}$ & $\frac{3}{16}$ Inch Diam.	$\frac{1}{4}$ Inch Diam.	$\frac{5}{16}$ Inch Diam.	$\frac{3}{8}$ Inch Diam.
1.....	\$0.60	\$0.95	\$1.40	\$2.20	$3\frac{3}{4}$	\$1.05	\$1.40	\$1.96	\$2.90
$1\frac{1}{4}$.....	.60	.95	1.40	2.20	4.....	1.10	1.45	2.03	3.00
$1\frac{1}{2}$.....	.60	.95	1.40	2.20	$4\frac{1}{4}$	1.15	1.50	2.10	3.10
$1\frac{3}{4}$.....	.65	1.00	1.40	2.20	$4\frac{1}{2}$	1.20	1.55	2.17	3.20
2.....	.70	1.05	1.47	2.20	$4\frac{3}{4}$	1.25	1.60	2.24	3.30
$2\frac{1}{4}$.....	.75	1.10	1.54	2.30	5.....	1.30	1.65	2.31	3.40
$2\frac{1}{2}$.....	.80	1.15	1.61	2.40	$5\frac{1}{4}$	1.35	1.70	2.38	3.50
$2\frac{3}{4}$.....	.85	1.20	1.68	2.50	$5\frac{1}{2}$	1.40	1.75	2.45	3.60
3.....	.90	1.25	1.75	2.60	$5\frac{3}{4}$	1.45	1.80	2.52	3.70
$3\frac{1}{4}$.....	.95	1.30	1.82	2.70	6.....	1.50	1.85	2.59	3.80
$3\frac{1}{2}$	1.00	1.35	1.89	2.80					

The following extras are understood as part of this list.
 Bolts without nuts 10% extra discount.
 Bolts with left-hand threads, add 25% to list price.
 Intermediate lengths charged at price of next larger size.
 Tire bolts of larger size than shown in this list are charged at list prices of Sleigh Shoe Bolts and Discount.

For Packing, see "Contents of Packages" at beginning of Bolt and Nut Section.



BOLTS AND NUTS—Cont'd

END SPRING BOLTS



Oval Head and Nut



Oval Head, Square Nut



Bevel Head

List Price per 100 with Square Nuts.

Length Under the Head, Inches	Diameter $\frac{5}{16}$ Inch	Diameter $\frac{3}{8}$ Inch	Diameter $\frac{7}{16}$ Inch
1½.....	\$4.00	\$5.00	\$7.40
1¾.....	4.00	5.00	7.40
2.....	4.10	5.00	7.40
2¼.....	4.20	5.20	7.60
2½.....	4.40	5.40	7.80
2¾.....	4.50	5.60	8.00
3.....	4.70	5.80	8.20
3¼.....	4.90	6.00	8.40
3½.....	5.00	6.20	8.60

Prices for Bolts with Oval Nuts will be quoted on application.

SHAFT COUPLING BOLTS



List Price per 100 with Square Head and Nut.

Length Under the Head, Ins.	Diam. $\frac{5}{16}$ Inch	Diam. $\frac{3}{8}$ Inch	Diam. $\frac{7}{16}$ Inch	Diam. $\frac{1}{2}$ Inch
2.....	\$5.00			
2¼.....		\$5.50	\$6.00	
2½.....			6.25	
2¾.....			6.50	
3.....			6.75	\$7.75
3¼.....				8.00
3½.....				8.25
3¾.....				8.50

WHIFFLETREE BOLTS

With Square Nuts, Bent Pattern



List Price per 100

Length Under the Head, Inches	Diameter $\frac{5}{16}$ Inch	Diameter $\frac{3}{8}$ Inch
3½.....	\$8.35	\$10.45
4.....	8.35	10.45
4½.....	8.35	10.45

Packed 50 in a box.

BOLTS AND NUTS—Cont'd

BRIDGE AND ROOF BOLTS OR RODS



Not Upset

Made with square head on one end and square nut on the other, or square nuts on each end as required. Fitted also with hexagon nuts when desired.

Any length up to 3 inches diameter.

Price quoted on receipt of specification.



Upset Ends

Made with both ends upset and fitted with square or hexagon nuts.

Any length up to 3 inches diameter.

Price quoted on receipt of specification.

DIMENSIONS OF UPSET ENDS ON BRIDGE AND ROOF BOLTS AND RODS

Diameter of bar, Inches	Diameter of upset, Inches	Length of upset, Inches	Threads per Inch	Diameter of bar, Inches	Diameter of upset, Inches	Length of upset, Inches	Threads per Inch
$\frac{1}{2}$	$\frac{5}{8}$	3	8	$1\frac{5}{8}$	$1\frac{7}{8}$	$5\frac{1}{2}$	$4\frac{1}{2}$
$\frac{5}{8}$	$\frac{3}{4}$	$3\frac{1}{2}$		$1\frac{3}{4}$	2	$5\frac{1}{2}$	$4\frac{1}{2}$
$\frac{3}{4}$	$\frac{7}{8}$	$3\frac{1}{2}$		$1\frac{7}{8}$	$2\frac{1}{8}$	6	$4\frac{1}{2}$
$\frac{7}{8}$	$1\frac{1}{8}$	4		2	$2\frac{3}{8}$	6	4
1	$1\frac{1}{4}$	4	7	2	$2\frac{1}{2}$	6	4
$1\frac{1}{8}$	$1\frac{3}{8}$	$4\frac{1}{2}$	6	$2\frac{1}{4}$	$2\frac{5}{8}$	$6\frac{1}{2}$	
$1\frac{1}{4}$	$1\frac{1}{2}$	$4\frac{1}{2}$	6	$2\frac{1}{2}$	$2\frac{7}{8}$	$6\frac{1}{2}$	
$1\frac{3}{8}$	$1\frac{5}{8}$	5	5	$2\frac{3}{4}$	$3\frac{1}{8}$	7	
$1\frac{1}{2}$	$1\frac{3}{4}$	5	5	3	$3\frac{1}{2}$	7	
$1\frac{1}{2}$	$1\frac{7}{8}$	5					

SILO RODS

Made any diameter and length required, with square or hexagon heads and nuts, and with cut or rolled threads.

Prices on application.

FOUNDATION BOLTS

We are prepared to furnish all sizes up to 4 inches diameter, any length required, with square or hexagon heads and nuts.

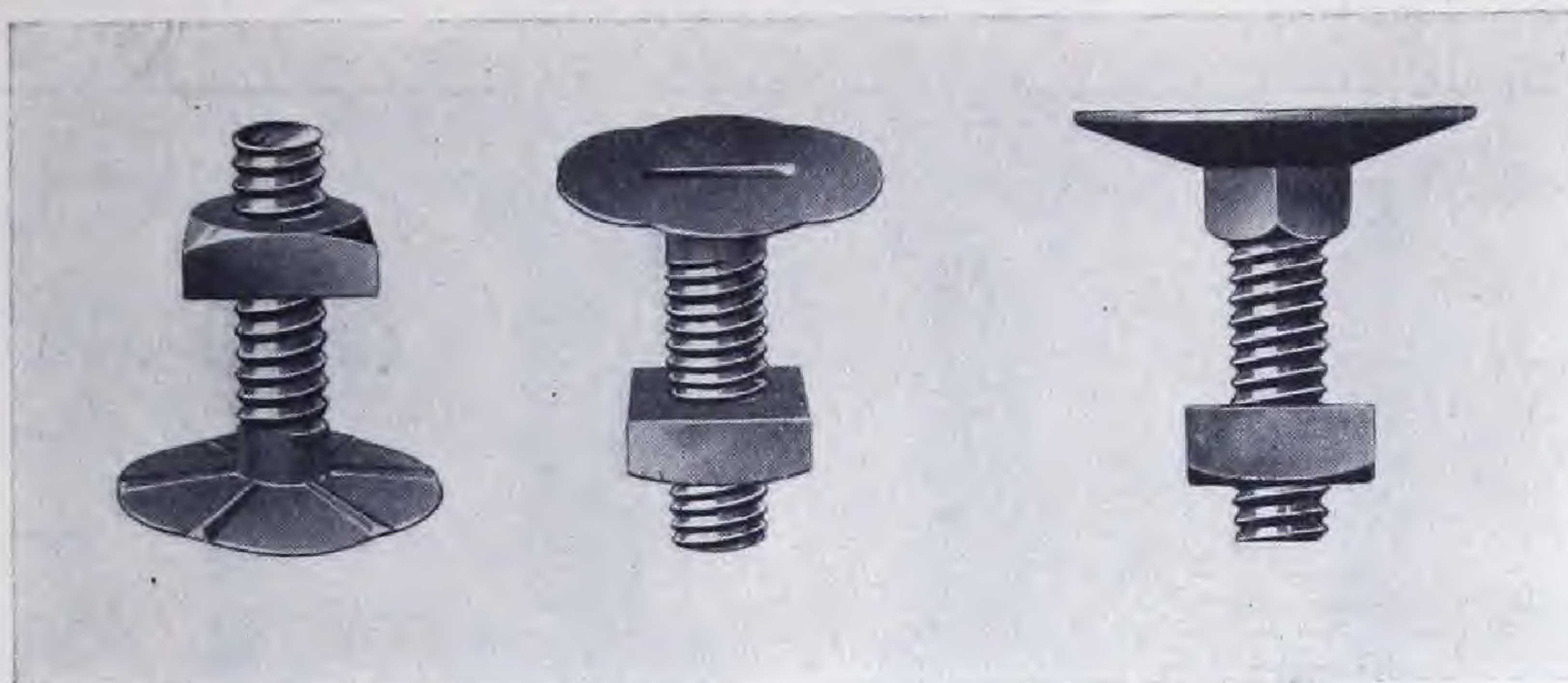
Prices on application.



BOLTS AND NUTS—Cont'd

ELEVATOR BOLTS

For Bolting Buckets to Grain Elevator Belts



Corrugated Head

Large Head

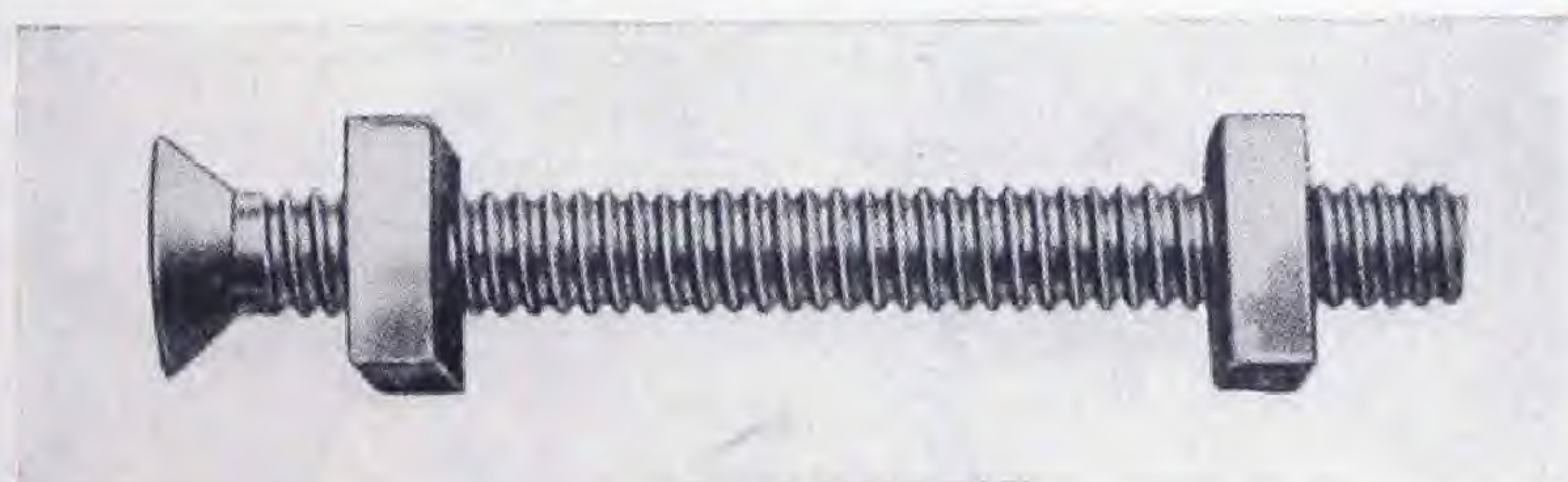
List Price per 100 with Square Nuts.

Length, overall, in Inches	$\frac{3}{16}$ " diam. Bolt		$\frac{1}{4}$ " diam. Bolt		$\frac{5}{16}$ " diam. Bolt		$\frac{3}{8}$ " diam. Bolt	
	Diameter of Head		Diameter of Head		Diameter of Head		Diameter of Head	
	Plain $\frac{3}{4}$ "	Corrugated $\frac{5}{8}$ "	Plain 1"	Corrugated $\frac{3}{4}$ "	Plain $1\frac{1}{8}$ "	Corrugated $1\frac{5}{16}$ "	Plain $1\frac{1}{4}$ "	Corrugated $1\frac{1}{8}$ "
$\frac{3}{4}$	\$2.20	\$2.20	\$2.20	\$2.20	\$3.00	\$3.00	\$4.00	\$4.00
$\frac{7}{8}$	2.30	2.30	2.30	2.30	3.00	3.00	4.00	4.00
1.....	2.30	2.30	2.30	2.30	3.00	3.00	4.00	4.00
$1\frac{1}{4}$	2.40	2.40	2.40	2.40	3.20	3.20	4.30	4.30
$1\frac{1}{2}$	2.50	2.50	2.50	2.50	3.40	3.40	4.60	4.60
$1\frac{3}{4}$	2.60	2.60	2.60	2.60	3.60	3.60	4.90	4.90

Elevator Bolts with larger diameter heads also made when requested. Prices on application.
All sizes put up in packages containing 100 Bolts with Nuts.

STEEL SINK BOLTS

With Two Square Steel Nuts



C.E.S.A. Standard
Threads.

List Price per 100.

Length, overall, in Inches	$\frac{1}{4}$ inch Diameter	Length, overall, in Inches	$\frac{1}{4}$ inch Diameter
1.....	\$2.10	$2\frac{1}{2}$	\$2.70
$1\frac{1}{4}$	2.20	$2\frac{3}{4}$	2.80
$1\frac{1}{2}$	2.30	3.....	2.90
$1\frac{3}{4}$	2.40	$3\frac{1}{2}$	3.10
2.....	2.50	4.....	3.30
$2\frac{1}{4}$	2.60		

All sizes put up in packages containing 100 Bolts with Nuts.
Also made in Brass. Prices on application.



BOLTS AND NUTS—Cont'd

STEEL STOVE BOLTS

With C.E.S.A. Standard Threads

Oval Head Bung Head Round Head Flat Head Small Oval Head or Band Bolt Truss Head



Round and Truss Head Stove Bolts measured under the head. Oval, Flat and Small Oval Head Stove Bolts measured from top of countersink. Bung Head Stove Bolts measured overall.

List Price per 100.

Adopted June 30, 1927.

The above stove bolts are sold from this list at varying discounts.

Length in Inches	$\frac{5}{32}$ Inch Diameter	$\frac{3}{16}$ Inch Diameter	$\frac{1}{4}$ Inch Diameter	$\frac{5}{16}$ Inch Diameter	$\frac{3}{8}$ Inch Diameter
$\frac{3}{8}$	\$.85	\$.85	....	....	....
$\frac{1}{2}$	.85	.85	\$1.20	....	....
$\frac{5}{8}$	.85	.85	1.20	....	....
$\frac{3}{4}$	.85	.85	1.20	\$1.75	\$2.65
$\frac{7}{8}$	.90	.90	1.25	1.80	2.75
1	.90	.90	1.30	1.85	2.85
$1\frac{1}{8}$	.95	.95	1.35	1.90	2.95
$1\frac{1}{4}$	1.00	1.00	1.40	1.95	3.05
$1\frac{3}{8}$	1.05	1.05	1.45	2.00	3.15
$1\frac{1}{2}$	1.10	1.10	1.50	2.05	3.25
$1\frac{3}{4}$	1.20	1.20	1.60	2.25	3.45
2	1.30	1.30	1.70	2.45	3.85
$2\frac{1}{4}$	....	1.45	1.85	2.60	4.05
$2\frac{1}{2}$	....	1.60	2.00	2.75	4.25
$2\frac{3}{4}$	....	1.70	2.10	2.90	4.45
3	....	1.80	2.20	3.05	4.65
$3\frac{1}{2}$	....	2.00	2.40	3.40	5.15
4	....	2.20	2.70	3.70	5.65
$4\frac{1}{2}$	....	2.40	3.00	4.00	6.15
5	....	2.60	3.30	4.40	6.65
$5\frac{1}{2}$	....	2.80	3.60	4.80	7.15
6	....	3.05	3.90	5.20	7.65

Lengths longer than 6" charged as Stove Rods.

Packed 100 bolts with nuts in a package.

Stove Bolts can be supplied in a variety of finishes, such as Blued, Cadmium Plated, Electro Galvanized, Nickel Plated, Chromium Plated. Extra price for special finish quoted on application.

Also made of Brass. Prices on application.



BOLTS AND NUTS—Cont'd

STOVE BOLTS

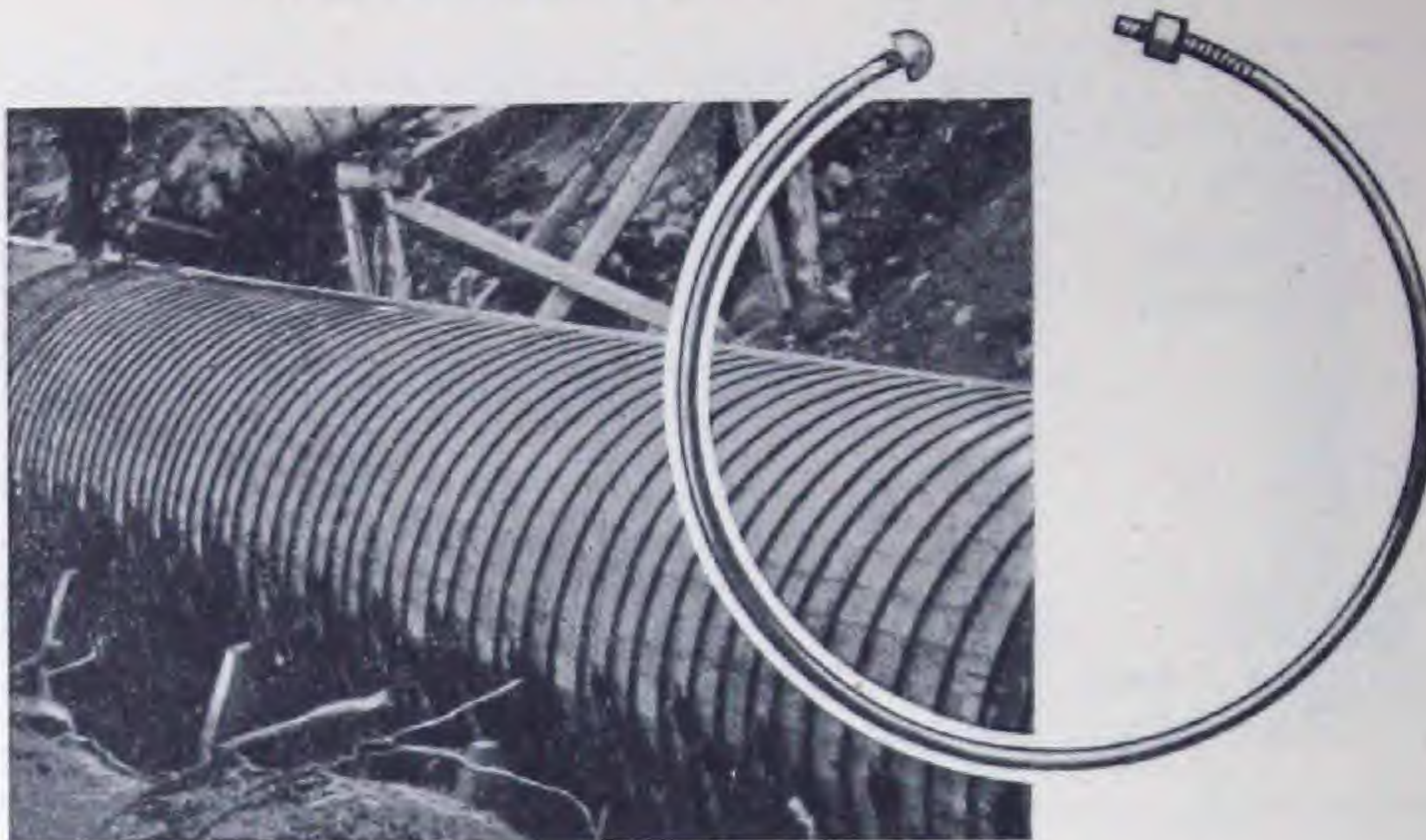
Approximate Weight in pounds of 100 Stove Bolts with Nuts.

	$\frac{1}{8}$ inch diameter		$\frac{5}{32}$ inch diameter		$\frac{3}{16}$ inch diameter		$\frac{1}{4}$ inch diameter		$\frac{5}{16}$ inch diameter		$\frac{3}{8}$ inch diameter	
No. of Threads per Inch	32		32		24		18		18		16	
Length overall in Inches	Flat Head	Round Head	Flat Head	Round Head	Flat Head	Round Head	Flat Head	Round Head	Flat Head	Round Head	Flat Head	Round Head
$\frac{3}{8}$.....	.40	.43	.56	.62	.74	.85	1.78	1.88	2.50	3.00	4.18	4.75
$\frac{1}{2}$.....	.44	.47	.61	.68	.82	.91	1.89	1.99	2.80	3.35	4.48	5.00
$\frac{5}{8}$.....	.48	.51	.67	.74	.90	.98	2.00	2.11	3.00	3.55	4.75	5.24
$\frac{3}{4}$.....	.51	.55	.72	.78	.96	1.05	2.14	2.25	3.21	3.75	4.98	5.49
$\frac{7}{8}$.....	.55	.59	.78	.83	1.02	1.13	2.27	2.37	3.46	3.95	5.24	5.75
1.....	.60	.63	.83	.88	1.10	1.22	2.40	2.47	3.70	4.15	5.50	6.05
$1\frac{1}{4}$.....	.65	.72	.95	.99	1.26	1.36	2.66	2.77	4.20	4.60	6.15	6.65
$1\frac{1}{2}$.....	.70	.78	1.07	1.10	1.41	1.50	2.90	2.97	4.60	5.00	6.75	7.15
$1\frac{3}{4}$.....	.75	.84	1.19	1.22	1.55	1.64	3.14	3.20	4.95	5.45	7.25	7.70
2.....	.82	.90	1.30	1.33	1.69	1.78	3.38	3.42	5.30	5.80	7.70	8.20
$2\frac{1}{4}$.....	.91	1.00	1.41	1.45	1.83	1.92	3.63	3.72	5.80	6.15	8.25	8.75
$2\frac{1}{2}$	1.00	1.10	1.52	1.58	1.97	2.06	3.89	4.01	6.25	6.55	8.75	9.35
$2\frac{3}{4}$	1.10	1.20	1.63	1.69	2.11	2.20	4.15	4.30	6.70	7.05	10.60	11.05
3.....	1.20	1.30	1.74	1.80	2.25	2.34	4.40	4.58	7.20	7.50	11.30	11.80
$3\frac{1}{2}$.....	.....	.....	.....	.....	3.05	3.25	6.00	6.30	8.80	9.20	12.85	13.30
4.....	.....	.....	.....	.....	3.46	3.67	6.65	7.00	9.75	10.15	14.25	14.80
$4\frac{1}{2}$.....	.....	.....	.....	.....	3.87	4.09	7.35	7.70	10.65	11.05	15.65	16.25
5.....	.....	.....	.....	.....	4.28	4.51	8.05	8.40	11.60	12.00	17.05	17.65
$5\frac{1}{2}$.....	.....	.....	.....	.....	4.67	4.93	8.75	9.05	12.55	12.90	18.45	19.10
6.....	.....	.....	.....	.....	5.05	5.35	9.35	9.65	13.55	13.90	19.90	20.55

All diameters except $\frac{1}{8}$ " follow the C.E.S.A. Standard number of threads per inch.

BOLTS AND NUTS—Cont'd

PIPE OR TANK BANDS



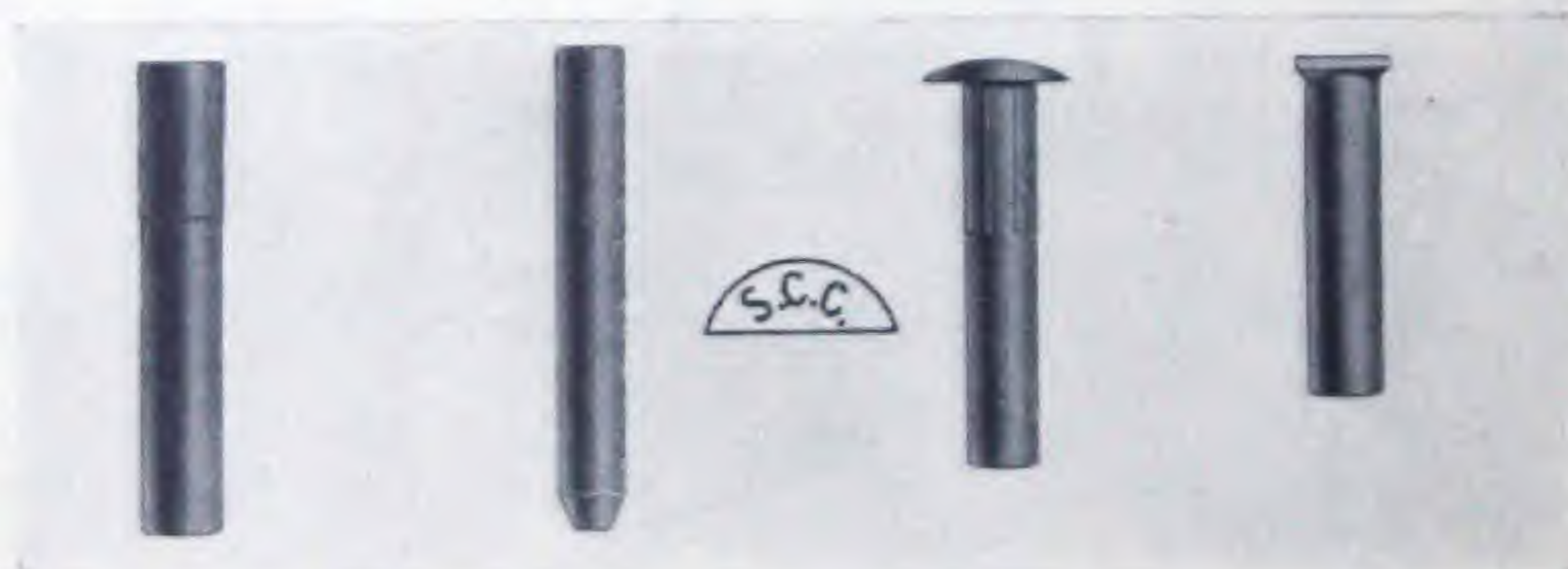
Pipe or Tank Bands are manufactured from round steel bars generally $\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$ or $\frac{7}{8}$ inch in diameter.

They are furnished straight or curved, as desired, in one or more pieces, headed one end and threaded the other or headed both ends or threaded both ends for any size of pipe or tank.

These bands can be furnished either plain or coated.

Prices on Application.

STOVE PINS



Taper

Headless Pointed

Ribbed

Bung Head

Stove Pins are made in various styles and lengths. They are sold at Standard Iron Rivet List and discount with special quantity extra when ordered in less than 100 pounds in one shipment.

Headless pointed pins are subject to a net extra charge of one per cent per pound.

STOVE HINGE PINS



Stove Hinge Pins are made to order in any length required. The diameters most in use are $\frac{3}{16}$ and $\frac{1}{32}$ inch.

Prices on Application.

GLOBE HEAD PINS

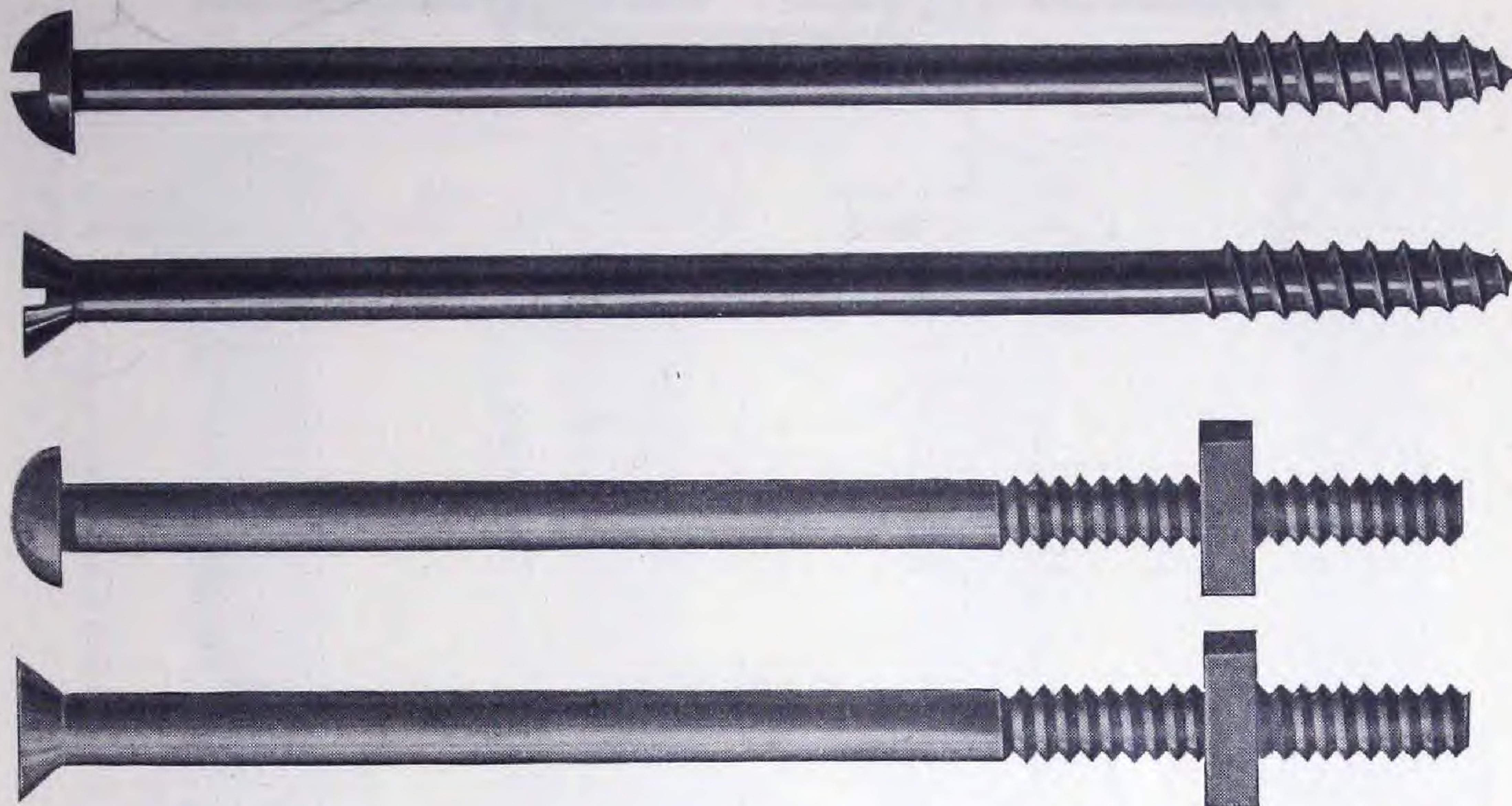
Globe Head Pins are made to order only.

Prices and Details on Application.



BOLTS & NUTS—Cont'd

STOVE, RANGE, FURNACE AND CHAIR RODS



Made any Length— $\frac{3}{16}$ " and $\frac{1}{4}$ " Diameter
 $\frac{1}{4}$ " Diameter Rods only carried in Stock.
 and in lengths 7" to 27 $\frac{1}{2}$ " advancing by $\frac{1}{2}$ inches.

Prices quoted on application.

All Stove and Chair Rods furnished Flat Head unless otherwise specified.
 Stove and Chair Rod heads are not slotted unless so specified.
 Stove Rods shorter than 7 inches charged as Stove Bolts.
 Supplied, as specified, with Wood Screw Thread or with C.E.S.A. Thread and Nut.
 Round Head Rods measured under the head.
 Flat Head Rods measured overall.

Approximate Weight in Pounds of 100 Flat Head Stove Rods— $\frac{1}{4}$ " Diameter

Length, Inches	Pounds	Length, Inches	Pounds	Length, Inches	Pounds
7	10.35	15	20.75	23	31.15
7 $\frac{1}{2}$	11.00	15 $\frac{1}{2}$	21.40	23 $\frac{1}{2}$	31.80
8	11.65	16	22.05	24	32.45
8 $\frac{1}{2}$	12.30	16 $\frac{1}{2}$	22.70	24 $\frac{1}{2}$	33.10
9	12.95	17	23.35	25	33.75
9 $\frac{1}{2}$	13.60	17 $\frac{1}{2}$	24.00	25 $\frac{1}{2}$	34.40
10	14.25	18	24.65	26	35.00
10 $\frac{1}{2}$	14.90	18 $\frac{1}{2}$	25.30	26 $\frac{1}{2}$	35.70
11	15.55	19	25.95	27	36.35
11 $\frac{1}{2}$	16.20	19 $\frac{1}{2}$	26.60	27 $\frac{1}{2}$	37.00
12	16.85	20	27.25	28	37.65
12 $\frac{1}{2}$	17.50	20 $\frac{1}{2}$	27.90	28 $\frac{1}{2}$	38.30
13	18.15	21	28.55	29	38.95
13 $\frac{1}{2}$	18.80	21 $\frac{1}{2}$	29.20	29 $\frac{1}{2}$	39.60
14	19.45	22	29.85	30	40.25
14 $\frac{1}{2}$	20.10	22 $\frac{1}{2}$	30.50		



BOLTS AND NUTS—Cont'd

DROP FORGED STEEL, STANDARD TURNBUCKLES



OPENING BETWEEN HEADS, 6 INCHES

Diameter of Stub Ends, Inches	List Price each with Stub Ends	List Price each without Stub Ends	Length of Stub Ends, Inches
3/8	\$.48	\$.30	8
7/16	.50	.32	8
1/2	.54	.34	8
9/16	.60	.37	8
5/8	.65	.40	8
3/4	.80	.49	8
7/8	.96	.60	9
1	1.20	.72	10
1 1/8	1.50	.92	10
1 1/4	1.85	1.12	10
1 3/8	2.25	1.38	10
1 1/2	2.70	1.65	10
1 5/8	3.50	2.15	10
1 3/4	4.30	2.65	13
1 7/8	6.70	4.10	13
2	7.00	4.50	13

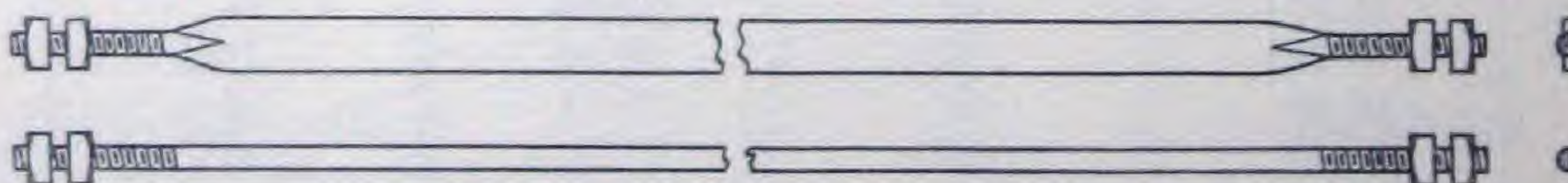
Diameter of Stub Ends, Inches	Length of Buckle With Ends, Inches	Weights			
		With Stubs		Without Stubs	
		Lb.	Oz.	Lb.	Oz.
3/8	22	1			8
7/16	22	1	6		12
1/2	22	1	8		12
9/16	22	2	3	1	2
5/8	22	2 1/2		1	2
3/4	23	3 1/2		1	6
7/8	24	4 1/2		2	
1	25	6 1/2		2	14
1 1/8	25	8 1/2		3 1/2	
1 1/4	26	10 3/4		5	
1 3/8	27	13		6	
1 1/2	27	16		7	
1 5/8	28	19		8 3/4	
1 3/4	28	21 1/2		10	
1 7/8	29	26 1/2		12 1/2	
2	29	30 1/2		14	

Above prices are for Standard length buckles, 6 inches clear between heads. U.S. Standard threads supplied unless otherwise specified.

These Turnbuckles are drop-forged from a bar, are free from welds and seams, making them absolutely reliable and giving a tensile strength of 60,000 pounds or more per square inch.

When ordering state whether stub ends are required.

RAILWAY TRACK TIE RODS



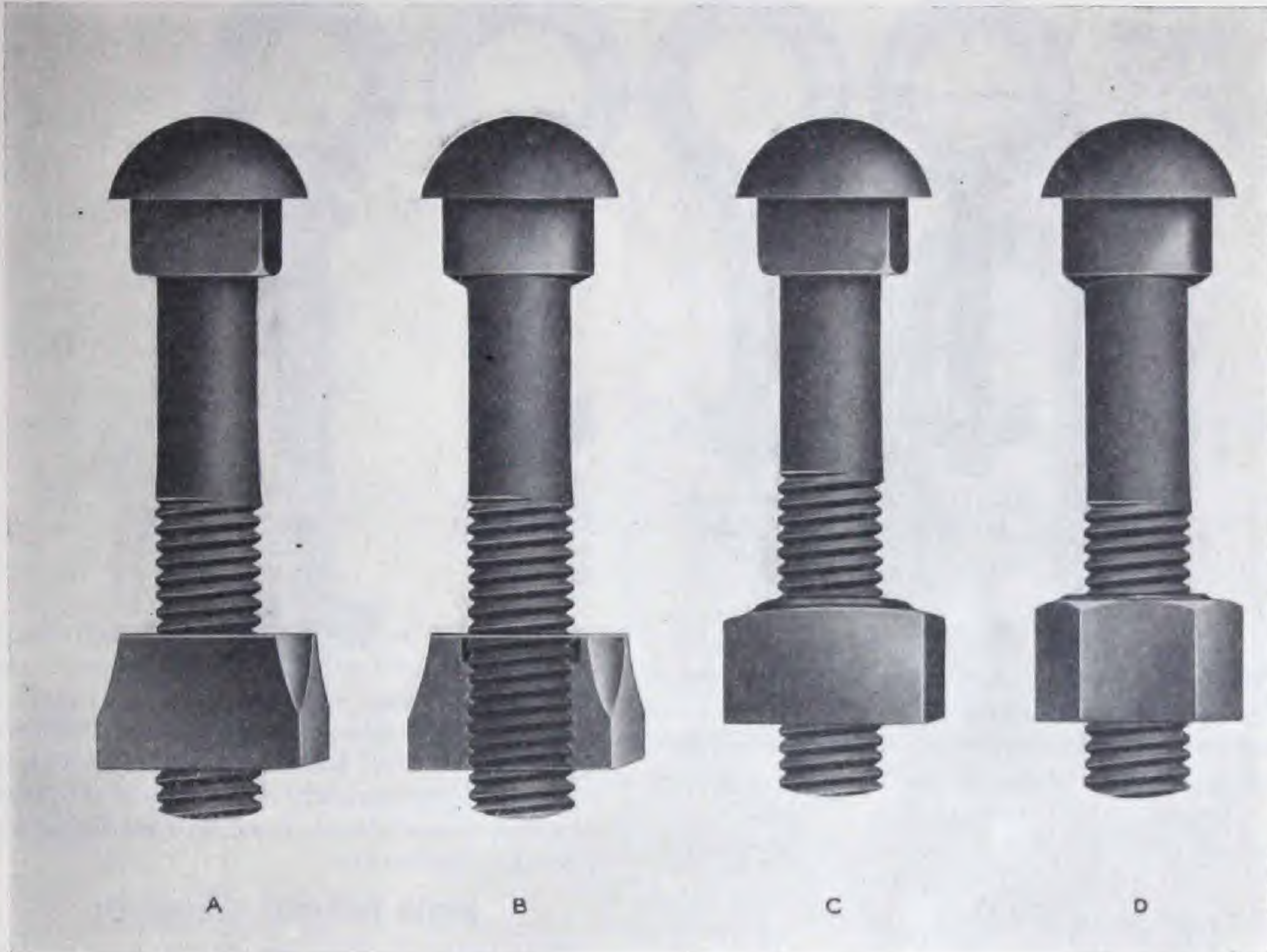
Tie Rods can be made to practically any dimensions desired, except swaged ends, in which case the diameter of the round end depends entirely on the sizes of the flat.

Unless otherwise specified, prices quoted are for tie rods supplied with two nuts on each end, one with a loose fit and one with a tight fit.

Submit specification with drawings, quantity, size and gauge.

BOLTS AND NUTS—Cont'd

RAILWAY TRACK BOLTS



A
Square Neck with
rolled thread and
Ideal Recessed Nut

B
Oval Neck with
rolled thread and
Ideal Recessed Nut

C
Square Neck with
rolled thread and
Square Nut

D
Oval Neck with
rolled thread and
Hexagon Nut

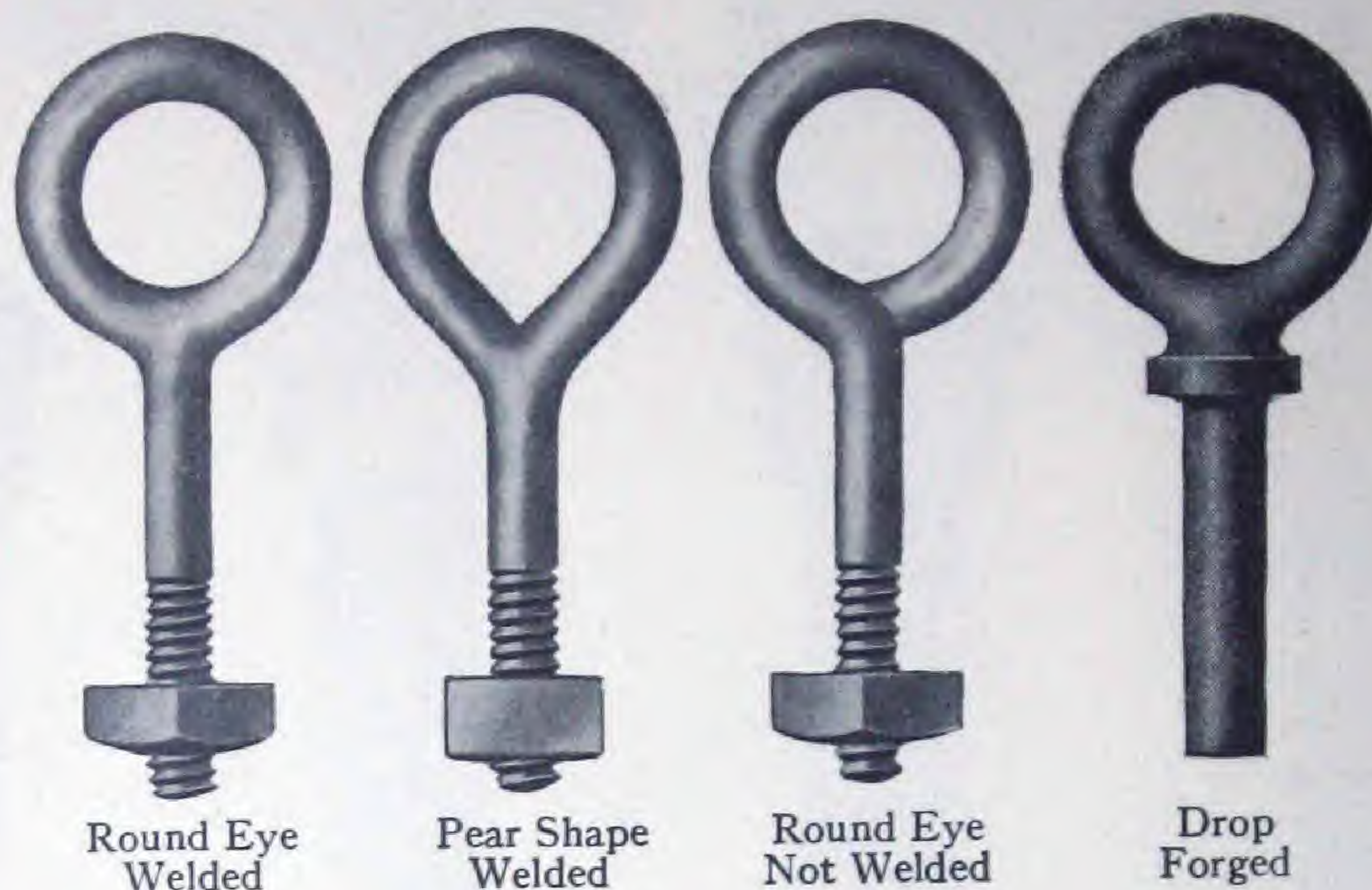
SIZES MADE

Oval or Square Neck

In Boxes of 200 Pounds

Diameter—Length in Inches	Approximate number in 200 Pounds	
	With Square Nuts	With Hexagon Nuts
1 x 5 $\frac{1}{4}$	104	...
1 x 5	106	...
1 x 4 $\frac{1}{2}$	110	...
1 x 4	114	...
$\frac{7}{8}$ x 5	143	...
$\frac{7}{8}$ x 4 $\frac{1}{2}$	156	...
$\frac{7}{8}$ x 4	162	...
$\frac{7}{8}$ x 3 $\frac{1}{2}$	170	...
$\frac{3}{4}$ x 4	198	215
$\frac{3}{4}$ x 3 $\frac{3}{4}$	210	220
$\frac{3}{4}$ x 3 $\frac{1}{2}$	220	230
$\frac{3}{4}$ x 3	240	250
$\frac{5}{8}$ x 3	480	520
$\frac{5}{8}$ x 2 $\frac{1}{2}$	500	540
$\frac{1}{2}$ x 2 $\frac{1}{4}$	880	920
$\frac{1}{2}$ x 2	900	960
$\frac{1}{2}$ x 1 $\frac{3}{4}$	960	1040
$\frac{3}{8}$ x 2	1900	2000
$\frac{3}{8}$ x 1 $\frac{1}{2}$	2000	2080

BOLTS AND NUTS—Cont'd



EYEBOLTS

Pear Shape Welded Eyebolts are standard and are generally supplied in the following sizes:—

Diameter, Inches	Width of Eye Inches	Length of Eye, Inches
$\frac{1}{2}$	$\frac{3}{4}$	1
$\frac{5}{8}$	$1\frac{1}{2}$	2
$\frac{3}{4}$	$1\frac{1}{2}$	2

Round eyes welded or open and other sizes of pear shaped eyes welded can be furnished also. Orders should state diameter of the bar; shape of eye; inside dimensions of eye; length from centre of eye to end of bolt. The length of an eyebolt is the distance from centre of the eye to the end of the bolt. All threaded eyebolts are fitted with one square nut. Prices on application.

DROP FORGED EYEBOLTS

Drop Forged Eyebolts are made with round eyes and plain shank. Made to order only. Submit sample or drawing for prices.

PLOW CLAMPS



Made from a round bar with square bends and fitted with square nuts unless otherwise ordered. When requesting prices give diameter of bar, width inside and inside length of legs. Prices on application.

BOLTS AND NUTS—Cont'd

HOOK BOLTS



Made from a round bar with 180 degree bend and fitted with square nut unless otherwise ordered. When requesting prices give diameter of bar; width inside and inside length of each leg.

NUTTED STAPLES



Made from a round bar with 180 degree or square bends and fitted with square nuts unless otherwise ordered. When requesting prices give diameter of bar; inside width; inside length of legs and state kind of bends.

FLOOR HOOKS



Diameter Inches	Length overall in Inches	Weight per 100 in pounds
$\frac{1}{2}$	5	36
$\frac{5}{8}$	6	76
$\frac{3}{4}$	7	115

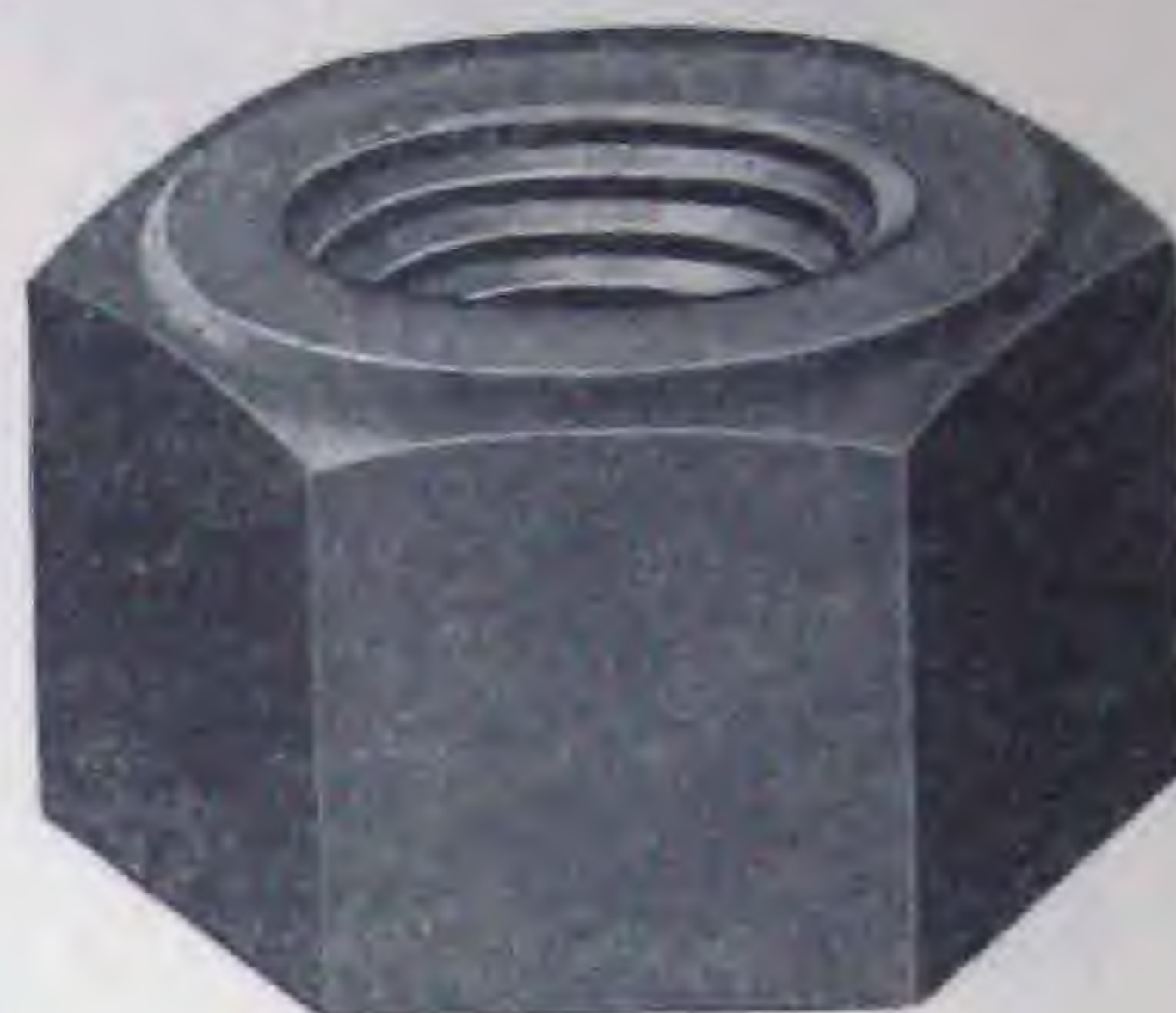
Prices on Application.



BOLTS AND NUTS—Cont'd



Square Nut



Hexagon Nut

HOT PRESSED AND FORGED SQUARE NUTS

United States Standard List Prices per 100 Pounds in 200 Pound Packages

Adopted January 2nd, 1924

Width Inches	Thickness Inches	Hole Inches	Bolt Inches	Price per 100 Pounds in 200 lb packages		Average Number per 100 Pounds
				Blank	Tapped	
$\frac{1}{2}$	$\frac{1}{4}$	$\frac{3}{16}$	$\frac{1}{4}$	\$13.00	\$15.00	7,875
$\frac{19}{32}$	$\frac{5}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	12.00	13.50	4,410
$\frac{11}{16}$	$\frac{3}{8}$	$\frac{19}{64}$	$\frac{3}{8}$	10.50	11.60	2,791
$\frac{25}{32}$	$\frac{7}{16}$	$\frac{11}{32}$	$\frac{7}{16}$	10.00	10.90	1,935
$\frac{7}{8}$	$\frac{1}{2}$	$\frac{13}{32}$	$\frac{1}{2}$	9.70	10.70	1,354
$\frac{31}{32}$	$\frac{9}{16}$	$\frac{29}{64}$	$\frac{9}{16}$	9.70	10.70	1,034
$1\frac{1}{16}$	$\frac{5}{8}$	$\frac{33}{64}$	$\frac{5}{8}$	9.30	10.00	798
$1\frac{1}{4}$	$\frac{3}{4}$	$\frac{5}{8}$	$\frac{3}{4}$	8.60	9.20	463
$1\frac{7}{16}$	$\frac{7}{8}$	$\frac{47}{64}$	$\frac{7}{8}$	8.40	9.00	290
$1\frac{5}{8}$	1	$\frac{27}{32}$	1	8.40	9.00	197
$1\frac{13}{16}$	$1\frac{1}{8}$	$\frac{15}{16}$	$1\frac{1}{8}$	8.40	9.00	143
2.....	$1\frac{1}{4}$	$1\frac{1}{16}$	$1\frac{1}{4}$	8.40	9.00	106
$2\frac{3}{16}$	$1\frac{3}{8}$	$\frac{15}{32}$	$1\frac{3}{8}$	8.50	9.10	79
$2\frac{3}{8}$	$1\frac{1}{2}$	$\frac{19}{32}$	$1\frac{1}{2}$	8.80	9.40	61
$2\frac{9}{16}$	$1\frac{5}{8}$	$\frac{11}{32}$	$1\frac{5}{8}$	9.00	9.70	48
$2\frac{3}{4}$	$1\frac{3}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	9.30	10.00	40
$2\frac{15}{16}$	$1\frac{7}{8}$	$\frac{15}{8}$	$1\frac{7}{8}$	9.50	10.30	34
$3\frac{1}{8}$	2	$\frac{123}{32}$	2	9.70	10.60	28

Net Extras	Per 100 Lbs.
If ordered in 100 pound packages.....	\$0.40
100 to 199 pounds of a size.....	.40
26 to 99 pounds of a size.....	1.00
25 pounds of a size or less.....	2.00
Left hand threads, add to net prices.....	25 per cent

Hexagon nuts can be supplied for Bolts over 2 inches. Prices on application.



BOLTS & NUTS—Cont'd

HOT PRESSED AND FORGED HEXAGON NUTS

United States Standard List Prices per 100 Pounds in 200-Pound Packages

Adopted January 2nd, 1924

Width Inches	Thickness Inches	Hole Inches	Bolt Inches	Price per 100 pounds in 200-lb. Packages		Average Number per 100 Pounds
				Blank	Tapped	
1/2	1/4	3/16	1/4	\$20.00	\$22.50	9,715
19/32	5/16	1/4	5/16	18.00	20.00	5,839
1 1/16	3/8	19/64	3/8	14.00	15.60	3,105
25/32	7/16	1 1/32	7/16	13.00	14.30	2,229
7/8	1/2	1 3/32	1/2	12.20	13.50	1,665
3 1/32	9/16	29/64	9/16	12.20	13.50	1,236
1 1/16	5/8	33/64	5/8	11.40	12.40	881
1 1/4	3/4	5/8	3/4	10.10	11.00	547
1 7/16	7/8	47/64	7/8	9.90	10.80	362
1 5/8	1	27/32	1	9.90	10.80	230
1 13/16	1 1/8	15/16	1 1/8	9.90	10.80	179
2	1 1/4	1 1/16	1 1/4	9.90	10.80	127
2 3/16	1 3/8	15/32	1 3/8	10.10	11.00	92
2 3/8	1 1/2	19/32	1 1/2	10.30	11.20	75
2 9/16	1 5/8	1 13/32	1 5/8	10.50	11.40	59
2 3/4	1 3/4	1 1/2	1 3/4	10.80	11.70	50
2 15/16	1 7/8	1 5/8	1 7/8	11.00	12.00	40
3 1/8	2	1 23/32	2	11.20	12.30	32
3 5/16	2 1/8	1 13/16	2 1/8	Price on application		28
3 1/2	2 1/4	1 15/16	2 1/4	Price on application		24
3 7/8	2 1/2	2 11/64	2 1/2	Price on application		17
4 1/4	2 3/4	2 27/64	2 3/4	Price on application		13
4 5/8	3	2 5/8	3	Price on application		10

HOT PRESSED AND FORGED SQUARE NUTS

United States Standard List Prices per 100 Pounds for 1/32" oversize nuts in 200-Pound Packages

Adopted January 2nd, 1924

Width Inches	Thickness Inches	Hole Inches	Bolt Inches	Price per 100 lbs. in 200-lb. Packages	
				Blank	Tapped
1/2	1/4	15/64	1/4	\$13.50	\$15.50
19/32	5/16	19/64	5/16	12.50	14.20
1 1/16	3/8	1 1/32	3/8	10.70	11.80
25/32	7/16	25/64	7/16	10.10	11.00
7/8	1/2	29/64	1/2	9.80	10.80
3 1/32	9/16	1/2	9/16	9.80	10.80
1 1/16	5/8	9/16	5/8	9.40	10.10
1 1/4	3/4	43/64	3/4	8.70	9.30
1 7/16	7/8	51/64	7/8	8.50	9.10
1 5/8	1	57/64	1	8.50	9.10

NET EXTRAS

	Per 100 lbs.
If ordered in 100-pound packages	\$0.40
100 to 199 pounds of a size	.40
26 to 99 pounds of a size	1.00
25 pounds of a size or less	2.00
Left hand threads, add to net prices	25 per cent



BOLTS & NUTS—Cont'd

HOT PRESSED AND FORGED SQUARE NUTS

List Prices per 100 Pounds for Extra Sizes in 200 Pound Packages.

Width Inches	Thickness Inches	Hole Inches	Bolt Inches	Price per 100 lbs. in 200-lb. Packages	
				Blank	Tapped
1 1/4	1 1/4	1 1/4	1 1/4	\$21.00	\$24.50
1 1/2	1 1/2	1 1/2	1 1/2	14.50	17.50
1 3/4	1 3/4	1 3/4	1 3/4	12.70	15.00
2	2	2	2	11.50	13.00
2 1/4	2 1/4	2 1/4	2 1/4	10.70	11.90
2 1/2	2 1/2	2 1/2	2 1/2	10.30	11.60
2 3/4	2 3/4	2 3/4	2 3/4	9.80	10.80
3	3	3	3	9.50	10.30
3 1/4	3 1/4	3 1/4	3 1/4	10.30	11.60
3 1/2	3 1/2	3 1/2	3 1/2	9.20	10.90
3 3/4	3 3/4	3 3/4	3 3/4	9.80	10.70
4	4	4	4	9.00	9.70
4 1/4	4 1/4	4 1/4	4 1/4	8.80	9.50
4 1/2	4 1/2	4 1/2	4 1/2	8.80	9.50
4 3/4	4 3/4	4 3/4	4 3/4	8.50	9.10

For sizes 1 1/4 inches and larger, see U.S. standard list.

HOT PRESSED AND FORGED HEXAGON NUTS

United States Standard List Prices per 100 Pounds for 1/2" oversize nuts in 200 Pound Packages.

Width Inches	Thickness Inches	Hole Inches	Bolt Inches	Price per 100 lbs. in 200-lb. Packages	
				Blank	Tapped
1 1/4	1 1/4	1 1/4	1 1/4	\$20.50	\$23.00
1 1/2	1 1/2	1 1/2	1 1/2	18.50	20.50
1 3/4	1 3/4	1 3/4	1 3/4	14.20	15.80
2	2	2	2	13.15	14.45
2 1/4	2 1/4	2 1/4	2 1/4	12.35	13.65
2 1/2	2 1/2	2 1/2	2 1/2	12.35	13.65
2 3/4	2 3/4	2 3/4	2 3/4	11.50	12.50
3	3	3	3	10.20	11.10
3 1/4	3 1/4	3 1/4	3 1/4	10.00	10.90
3 1/2	3 1/2	3 1/2	3 1/2	10.00	10.90

HOT PRESSED AND FORGED HEXAGON NUTS

List Prices per 100 Pounds for Extra Sizes in 200 Pound Packages.

Width Inches	Thickness Inches	Hole Inches	Bolt Inches	Price per 100 lbs. in 200-lb. Packages	
				Blank	Tapped
1 1/4	1 1/4	1 1/4	1 1/4	\$24.00	\$27.70
1 1/2	1 1/2	1 1/2	1 1/2	20.00	23.00
1 3/4	1 3/4	1 3/4	1 3/4	16.00	18.00
2	2	2	2	13.50	15.40
2 1/4	2 1/4	2 1/4	2 1/4	12.90	14.70
2 1/2	2 1/2	2 1/2	2 1/2	12.35	13.65
2 3/4	2 3/4	2 3/4	2 3/4	12.00	13.25
3	3	3	3	12.90	14.70
3 1/4	3 1/4	3 1/4	3 1/4	11.75	12.85
3 1/2	3 1/2	3 1/2	3 1/2	12.20	13.40
3 3/4	3 3/4	3 3/4	3 3/4	10.60	11.70
4	4	4	4	10.40	11.50
4 1/4	4 1/4	4 1/4	4 1/4	10.40	11.50
4 1/2	4 1/2	4 1/2	4 1/2	10.00	10.90

For sizes 1 1/4 inches and larger, see U.S. standard list.

NET EXTRAS

	Per 100 lbs.
If ordered in 100 pound packages	\$0.40
100 to 199 pounds of a size	.40
20 to 99 pounds of a size	1.00
25 pounds of a size or less	2.00
Left hand threads, add to net prices	25 per cent



BOLTS AND NUTS—Cont'd

COLD PRESSED TAPPED NUTS

For Machine Screws

SQUARE AND HEXAGON
CROWNED



Size No.	Threads per inch	Dimensions across Flat Approximate	Thickness	Approximate Number per Lb.				List Price per Gross			
				Steel		Brass		Steel		Brass	
				Square	Hexagon	Square	Hexagon	Square	Hexagon	Square	Hexagon
2	56, 64	$\frac{3}{16}$	$\frac{1}{16}$	2112	2688	2016	2400	\$.42	\$.50	\$1.28	\$1.51
3	48, 56	$\frac{3}{16}$	$\frac{1}{16}$	2400	2880	2128	2528	.42	.50	1.28	1.51
4	40, 48	$\frac{1}{4}$	$\frac{3}{32}$	800	990	720	850	.31	.36	.92	1.08
6	32, 40	$\frac{5}{16}$	$\frac{3}{32}$	544	640	480	544	.31	.36	.92	1.08
8	32, 36	$\frac{11}{32}$	$\frac{3}{32}$	448	560	400	480	.35	.40	1.11	1.30
10	24, 32	$\frac{3}{8}$	$\frac{1}{8}$	270	336	256	300	.37	.43	1.47	1.73
12	24, 28	$\frac{3}{8}$	$\frac{1}{8}$	304	364	288	352	.46	.55	1.83	2.16
$\frac{1}{4}$	20, 28	$\frac{1}{2}$	$\frac{11}{64}$	105	144	100	120	.62	.72	2.39	2.81
$\frac{5}{16}$	18, 24	$\frac{9}{16}$	$\frac{7}{32}$	72	96	64	80	1.04	1.22	5.14	6.05
$\frac{3}{8}$	16, 24	$\frac{5}{8}$	$\frac{1}{4}$	52	64	48	58	1.35	1.58	6.98	8.21

Packed in one gross packages.
Special sizes can be supplied.
Prices on application.


The following finishes can also be supplied:—Nickel, Copper, Brass, Bronze and Cadmium Plated, also Electro Galvanized, Blued and Japanned.

STOVE BOLT NUTS

Cold Pressed

Tapped

Square Uncrowned

	Bolt Size Inches	Threads per inch	Dimensions across Flat Approximate	Thickness	Approx. No. per Lb.	List Price per 100
	$\frac{1}{8}$	32	$\frac{5}{16}$	$\frac{3}{32}$	825	\$.24
	$\frac{1}{8}$	40	$\frac{5}{16}$	$\frac{3}{32}$	416	.24
	$\frac{5}{32}$	32	$\frac{11}{32}$	$\frac{3}{32}$	256	.24
	$\frac{3}{16}$	24	$\frac{3}{8}$	$\frac{1}{8}$	100	.26
	$\frac{1}{4}$	18	$\frac{1}{2}$	$\frac{11}{64}$	71	.43
	$\frac{5}{16}$	18	$\frac{9}{16}$	$\frac{7}{32}$	50	.72
	$\frac{3}{8}$	16	$\frac{5}{8}$	$\frac{1}{4}$		.94

Packed 100 pieces in a package.

Uncrowned Hexagon Stove Bolt Nuts can be supplied also.


TIRE BOLT NUTS

Cold Pressed

Tapped

Square Crowned

For Fluted Bolts

	Bolt Size Inches	Threads per inch	Dimensions across Flat Approximate	Thickness	List Price per 100
	$\frac{3}{16}$	24	$\frac{23}{64}$	$\frac{9}{64}$	\$.26
	$\frac{1}{4}$	22	$\frac{7}{16}$	$\frac{3}{16}$	.43
	$\frac{5}{16}$	18	$\frac{1}{2}$	$\frac{11}{64}$	.72
	$\frac{3}{8}$	18	$\frac{21}{32}$	$\frac{19}{64}$	.94

Packed 100 pieces in a package.

Crowned Hexagon Tire Bolt Nuts can be supplied also.



BOLTS AND NUTS—Cont'd

MICA OR FANCY NUTS



Sizes $\frac{3}{16}$ " and $\frac{1}{4}$ " carried in stock and supplied with or without bolts. Packed 100 pieces in a package. Prices on application. Also supplied nickel plated and polished when required.

THUMB OR WING NUTS



Malleable Iron, Tapped

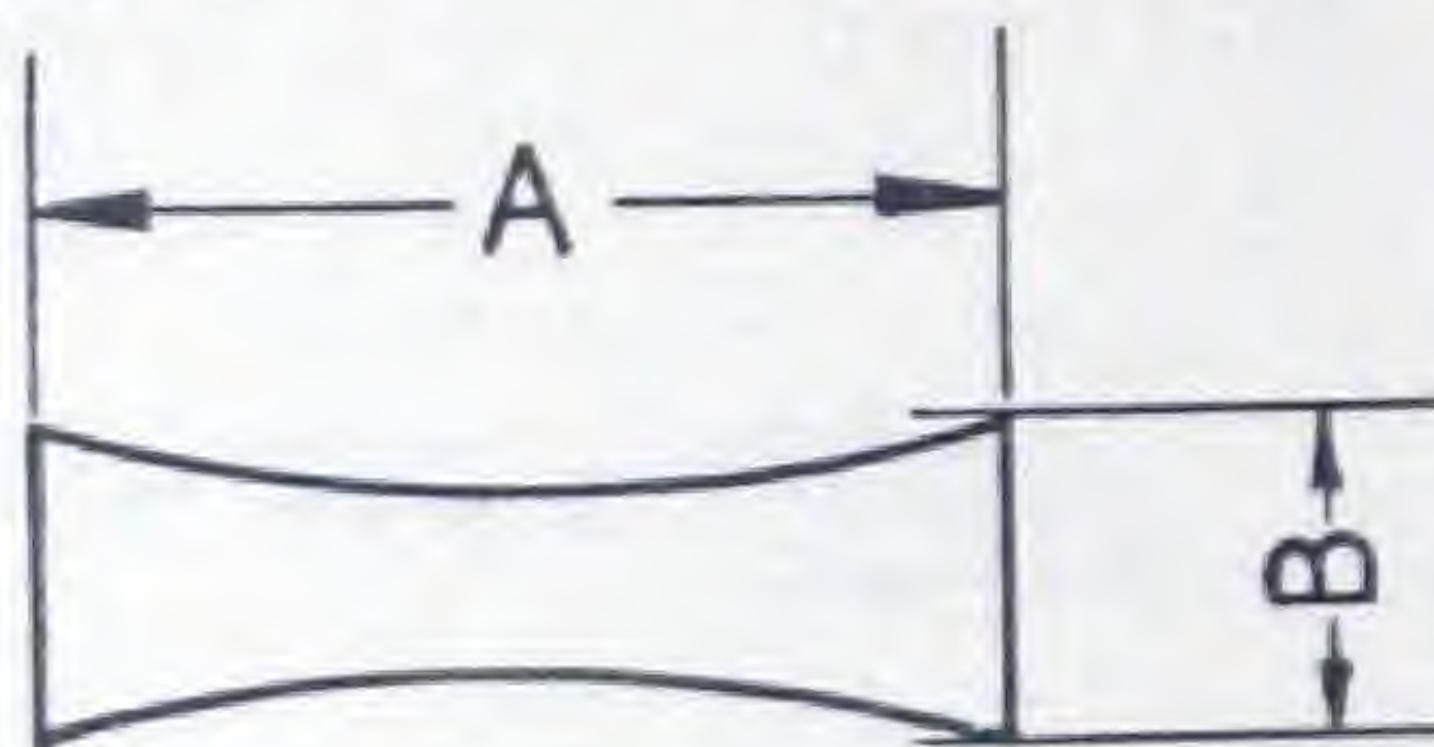
Size, Inches	List per 100	Size, Inches	List per 100
$\frac{3}{32}$	\$4.50	$\frac{3}{8}$	\$10.00
$\frac{1}{8}$	5.00	$\frac{7}{16}$	12.00
$\frac{5}{32}$	5.50	$\frac{1}{2}$	16.00
$\frac{3}{16}$	6.00	$\frac{9}{16}$	21.00
$\frac{1}{4}$	7.00	$\frac{5}{8}$	26.00
$\frac{5}{16}$	8.00	$\frac{3}{4}$	37.00

BOSS LOCK NUTS

List Price per 1000. Adopted April 1st, 1921.



Hexagon



Square

Boss Lock Nuts are recognized as one of the splendid devices contributing to the safe and economical operation of Railways, Automotive Equipment, Agricultural Implements and Industrial Machinery of every description.

The benefits accruing to those using these nuts are:—

- The elimination of accidents and delays due to "missing" nuts.
- Prolonged service from equipment due to positive security of all bolted parts.
- Reductions in quantities of bolts and nuts used and cost of maintenance.

Boss Lock Nuts possess six leading features which serve to make them the ideal type of lock nut.

1. Cannot be shaken off when subjected to vibration and shock.
2. Easily and quickly applied.
3. Will lock effectively on undersized bolts.
4. Do not injure or destroy bolt threads.
5. Make it unnecessary to secure the bolt against rotation, when being applied.
6. Enable inspectors to tell at a glance that the nut is locked.

Size of Bolt	A	B	Square Price per Thousand	Hexagon Price per Thousand	Size of Bolt	A	B	Square Price per Thousand	Hexagon Price per Thousand
$\frac{1}{4}$	$1\frac{5}{32}$	$1\frac{3}{64}$	\$7.50	\$9.50	1	$1\frac{9}{16}$	$1\frac{7}{32}$	\$28.25	\$33.00
$\frac{5}{16}$	$1\frac{7}{32}$	$1\frac{3}{64}$	8.50	9.75	$1\frac{1}{8}$	$1\frac{3}{4}$	$1\frac{9}{32}$	37.50	43.25
$\frac{3}{8}$	$\frac{5}{8}$	$\frac{1}{4}$	8.50	9.75	$1\frac{1}{4}$	$1\frac{15}{16}$	$\frac{5}{8}$	47.00	54.50
$\frac{7}{16}$	$2\frac{3}{32}$	$\frac{9}{32}$	9.50	11.25	$1\frac{3}{8}$	$2\frac{1}{8}$	$\frac{5}{8}$	56.25	65.75
$\frac{1}{2}$	$2\frac{13}{32}$	$\frac{5}{16}$	9.50	11.25	$1\frac{1}{2}$	$2\frac{5}{16}$	$1\frac{1}{16}$	65.75	78.00
$\frac{9}{16}$	$2\frac{9}{32}$	$1\frac{1}{32}$	12.25	14.00	$1\frac{5}{8}$	$2\frac{1}{2}$	$\frac{3}{4}$	75.00	89.00
$\frac{5}{8}$	1	$\frac{3}{8}$	12.25	14.00	$1\frac{3}{4}$	$2\frac{11}{16}$	$\frac{3}{4}$	93.75	112.50
$\frac{3}{4}$	$1\frac{3}{16}$	$2\frac{9}{64}$	15.00	18.00	$1\frac{7}{8}$	$2\frac{27}{32}$	$1\frac{3}{16}$	112.50	131.25
$\frac{7}{8}$	$1\frac{3}{8}$	$\frac{1}{2}$	18.75	21.50	2	3	$\frac{7}{8}$	115.00	168.75

* $\frac{1}{2}$ inch Boss Nuts are made 13 threads; 12 threads will be furnished if specified.

Boss Lock Nuts are regularly furnished with U.S.S. threads. S.A.E., Whitworth or special threads, prices will be quoted on application.

When ordering, please specify "Square" or "Hexagon."

Boss Lock Nuts are packed in standard nut Kegs (12" x 18") which contain, approximately, two hundred pounds each.



WASHERS

Canadian Manufacturers' Standards
List of September 23, 1918.

IN ORDERING, THE ACTUAL SIZE OF HOLE MUST BE SPECIFIED

Packed in Boxes of 50 Pounds

ROUND WASHERS



SQUARE WASHERS



Size of Hole Inches	Outside Diameter Inches	Size of Bolt Inches	Price per 100 lbs.	Estimated No. in 100 lbs.
$\frac{3}{16}$	$\frac{7}{16}$	$\frac{1}{8}$	\$32.00	64,000
$\frac{1}{4}$	$\frac{9}{16}$	$\frac{3}{16}$	28.00	39,400
$\frac{5}{16}$	$\frac{3}{4}$	$\frac{1}{4}$	24.40	15,000
$\frac{3}{8}$	$\frac{7}{8}$	$\frac{5}{16}$	22.80	11,250
$\frac{7}{16}$	1	$\frac{3}{8}$	21.00	6,800
$\frac{1}{2}$	$1\frac{1}{4}$	$\frac{7}{16}$	19.60	4,300
$\frac{9}{16}$	$1\frac{3}{8}$	$\frac{1}{2}$	18.80	2,600
$\frac{5}{8}$	$1\frac{1}{2}$	$\frac{9}{16}$	18.60	2,250
$1\frac{1}{16}$	$1\frac{3}{4}$	$\frac{5}{8}$	18.40	1,300
$\frac{3}{4}$	$1\frac{3}{4}$	$1\frac{1}{16}$	18.20	1,580
$1\frac{3}{16}$	2	$\frac{3}{4}$	18.20	1,010
$\frac{7}{8}$	2	$1\frac{5}{16}$	18.20	1,110
$1\frac{5}{16}$	$2\frac{1}{4}$	$\frac{7}{8}$	18.00	860
$1\frac{1}{16}$	$2\frac{1}{2}$	1	18.00	625
$1\frac{1}{8}$	$2\frac{1}{2}$	$1\frac{1}{16}$	18.00	670
$1\frac{1}{4}$	$2\frac{3}{4}$	$1\frac{1}{8}$	18.00	520
$1\frac{5}{16}$	$2\frac{3}{4}$	$1\frac{1}{8}$	18.00	570
$1\frac{3}{8}$	3	$1\frac{1}{4}$	18.40	400
$1\frac{1}{2}$	$3\frac{1}{4}$	$1\frac{3}{8}$	18.40	300
$1\frac{5}{8}$	$3\frac{1}{2}$	$1\frac{1}{2}$	18.40	280
$1\frac{3}{4}$	$3\frac{3}{4}$	$1\frac{5}{8}$	19.00	240
$1\frac{7}{8}$	4	$1\frac{3}{4}$	19.00	215
2	$4\frac{1}{4}$	$1\frac{7}{8}$	19.00	190
$2\frac{1}{8}$	$4\frac{1}{2}$	2	19.00	175

Net Extras

26 to 49 pounds of a size—\$1.00 per 100 pounds
25 pounds of a size or less—\$2.00 per 100 pounds

Size of Hole Inches	Outside Edges Inches	Thickness Inches	Size of Bolt Inches	Estimated No. in 100 lbs.
$\frac{7}{16}$	$1\frac{1}{2}$	$\frac{1}{8}$	$\frac{3}{8}$	1,300
$\frac{1}{2}$	$1\frac{3}{4}$	$\frac{1}{8}$	$\frac{7}{16}$	1,100
$\frac{9}{16}$	2	$\frac{3}{16}$	$\frac{1}{2}$	500
$1\frac{1}{16}$	$2\frac{1}{4}$	$\frac{3}{16}$	$\frac{5}{8}$	390
$2\frac{3}{32}$	$2\frac{1}{4}$	$\frac{1}{4}$	$\frac{5}{8}$	315
$1\frac{3}{16}$	$2\frac{1}{4}$	$\frac{3}{16}$	$\frac{3}{4}$	426
$\frac{3}{4}$	$2\frac{1}{4}$	$\frac{3}{16}$	$4\frac{7}{64}$	409
$2\frac{7}{32}$	$2\frac{1}{2}$	$\frac{1}{4}$	$\frac{3}{4}$	250
$1\frac{3}{16}$	3	$\frac{1}{4}$	$\frac{3}{4}$	169
$2\frac{1}{32}$	3	$\frac{1}{4}$	$\frac{7}{8}$	171
$1\frac{3}{32}$	$3\frac{1}{2}$	$\frac{3}{8}$	1	87
$1\frac{1}{4}$	4	$\frac{3}{8}$	$1\frac{1}{8}$	65
$1\frac{3}{8}$	$4\frac{1}{2}$	$\frac{3}{8}$	$1\frac{1}{4}$	48
$1\frac{1}{2}$	5	$\frac{3}{8}$	$1\frac{3}{8}$	40
$1\frac{5}{8}$	6	$\frac{3}{8}$	$1\frac{1}{2}$	27
$1\frac{7}{8}$	6	$\frac{3}{8}$	$1\frac{3}{4}$	28
$2\frac{1}{8}$	6	$\frac{3}{8}$	2	29

Prices on Application

PACKAGE ALLOWANCE

If taken in Kegs about 175 lbs. each, allowance 10c. per 100 lbs.

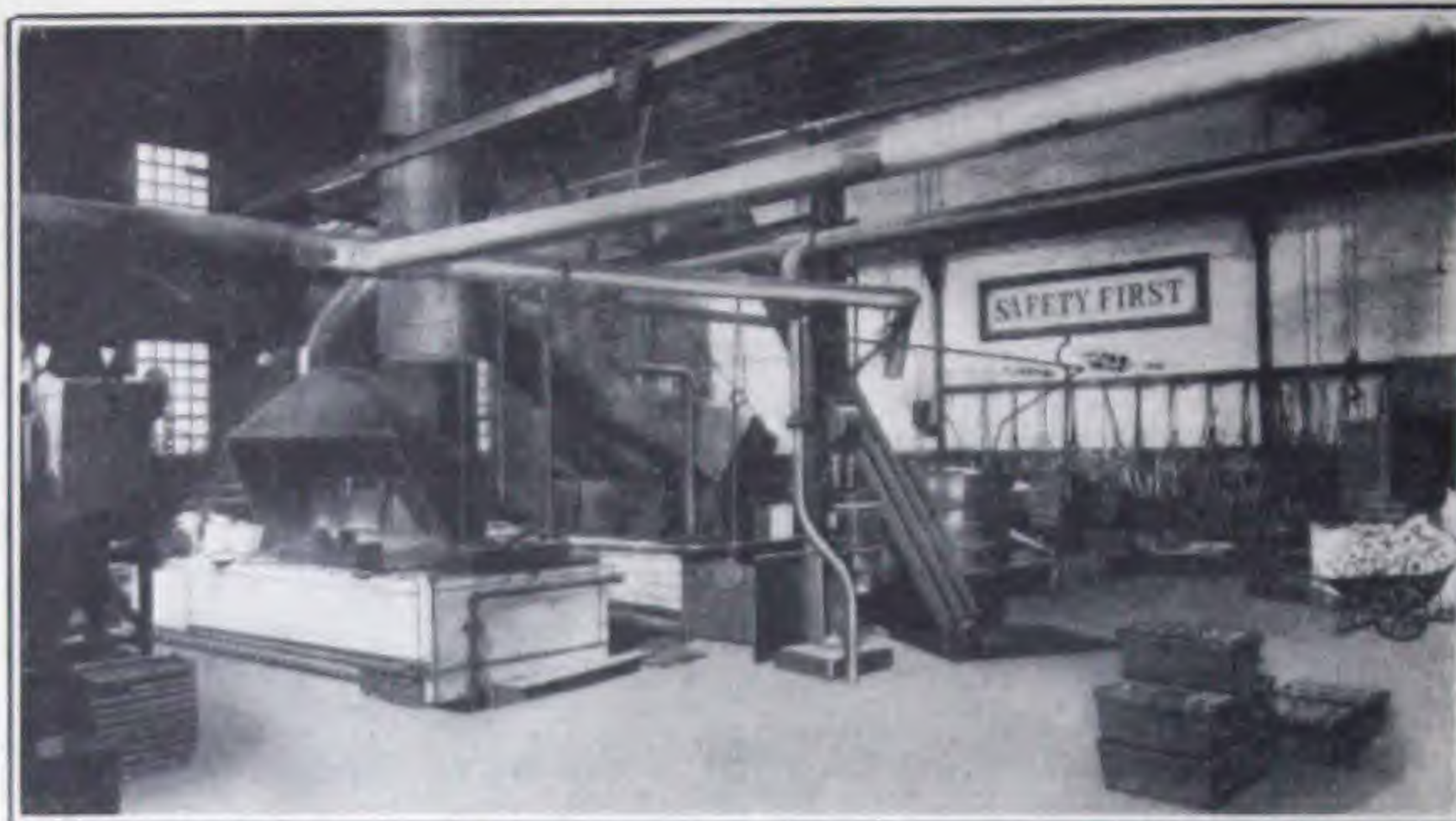
If taken in bags about 100 lbs., allowance 15c per 100 lbs.

For special Washers, prices will be quoted on application.

GALVANIZED WASHERS

Washers are galvanized by the hot process. Extra quoted on application.

POLE LINE HARDWARE



Hot Dip Galvanizing Department



Inspection and Packing Department

Introducing sections of this catalogue devoted to the production of steel from the ore, and to the production of bars, forgings and bolts, we have stressed our ability to meet the highest standard of quality for each product. Each of these steps of production applies equally in the manufacture of Pole Line Hardware. With these extensive facilities available, a product of merit meeting a very high standard of quality is assured.

All Stelco Pole Line Hardware is galvanized by the Hot Dip Process and is guaranteed to meet or exceed the standard four one-minute immersions test.

We are also the sole licensees in Canada for the Diamond Hot Dip Process for galvanizing small or threaded articles which assures a uniform coating and lustrous finish and eliminates any necessity for re-chasing threads.

POLE LINE HARDWARE—Cont'd

Hot Galvanized

GROUND RODS



Ground Rods are supplied wired or plain in sizes shown. Made from high carbon open hearth steel to give hardness. Points are sharp and hard, for easy driving in any kind of soil.

Wired rods have a No. 12 gauge wire, welded to rod with loose end five inches long.

Unwired or plain rods are drilled near the top end for fastening ground wires.

Diameter in Inches	Length in Feet	List Price per 100	Weight per 100 Pcs. in Lbs.
Wired Rods			
1 $\frac{1}{2}$ $\frac{1}{2}$ $\frac{5}{8}$	5	On Application	325
	6		396
	6		597
	8		2131
Plain Rods			
1 $\frac{3}{8}$ $\frac{3}{8}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{5}{8}$ $\frac{5}{8}$ $\frac{5}{8}$	5	\$21.30	152
	6	25.35	196
	5	33.65	300
	6	39.65	358
	7	44.20	419
	6	59.10	595
	7	68.60	698
	8	81.00	796
	8	160.00	2129

GUY HOOKS



Made from half oval steel to protect guy wires against sharp edges. Item 1 is single hole pattern; item 2 is supplied with two holes staggered for greater security when fastened.

Size Steel, Inches	Length	List Price per 100	Diameter of Holes, Inches	Wgt. per 100 Pcs. Lbs.
1 3/4 x 3/8	4	\$9.50	1 1/16	85
1 1/2 x 3/8	6	9.50	9/16	90

POLE OR GUY SHIMS

holes 1/4" diameter



Serve as a pad between guy wire and wooden pole—prevent the wire from cutting the pole, also moisture from accumulating and causing the wire to corrode.

Sufficient shims should be used to prevent the guy wire from bearing on the pole at any point.

Dimensions in Inches	List Price per 100 Count	Weight per 100 pcs. in Lbs.
1 x 3/16 x 8	\$5.50	40
1 1/4 x 3/16 x 8	7.50	48

POLE DATING NAILS



Driven into pole to record date of setting; also used sometimes to record the height of pole. Any two figures can be furnished.

Length in Inches	List Price	Approx. No. per Lb.
1 1/2	On Application	39
2 1/2		27

CROSS ARM BRACES



9/16" hole

7/16" hole

Length overall in Inches	1 3/16" x 3/16"	
	List Price per 100	Wgt. per 100 Pcs. in Lbs.
30	\$14.30	175

Length overall in Inches	1 7/32" x 7/32"		1" x 1/4"		1 1/4" x 1/4"	
	List Price per 100	Wgt. per 100 Pcs. in lbs.	List Price per 100	Wgt. per 100 Pcs. in lbs.	List Price per 100	Wgt. per 100 Pcs. in lbs.
20	\$11.50	141	\$ 9.60	139	\$11.50	166
22	12.50	155	10.60	153	12.50	182
24	13.50	168	11.60	167	13.50	198
26	14.50	182	12.60	180	14.50	214
28	15.60	198	12.95	194	15.60	233
30	17.10	212	14.30	208	17.10	250
32	18.50	225	..	..	18.50	265
34	..	..	..	..	20.00	320

Cross Arm Braces can be furnished any size and punched as desired.

POLE LINE HARDWARE—Cont'd

Hot Galvanized

GUY OR ANCHOR RODS

Oval Eye, Drop Forged or Welded

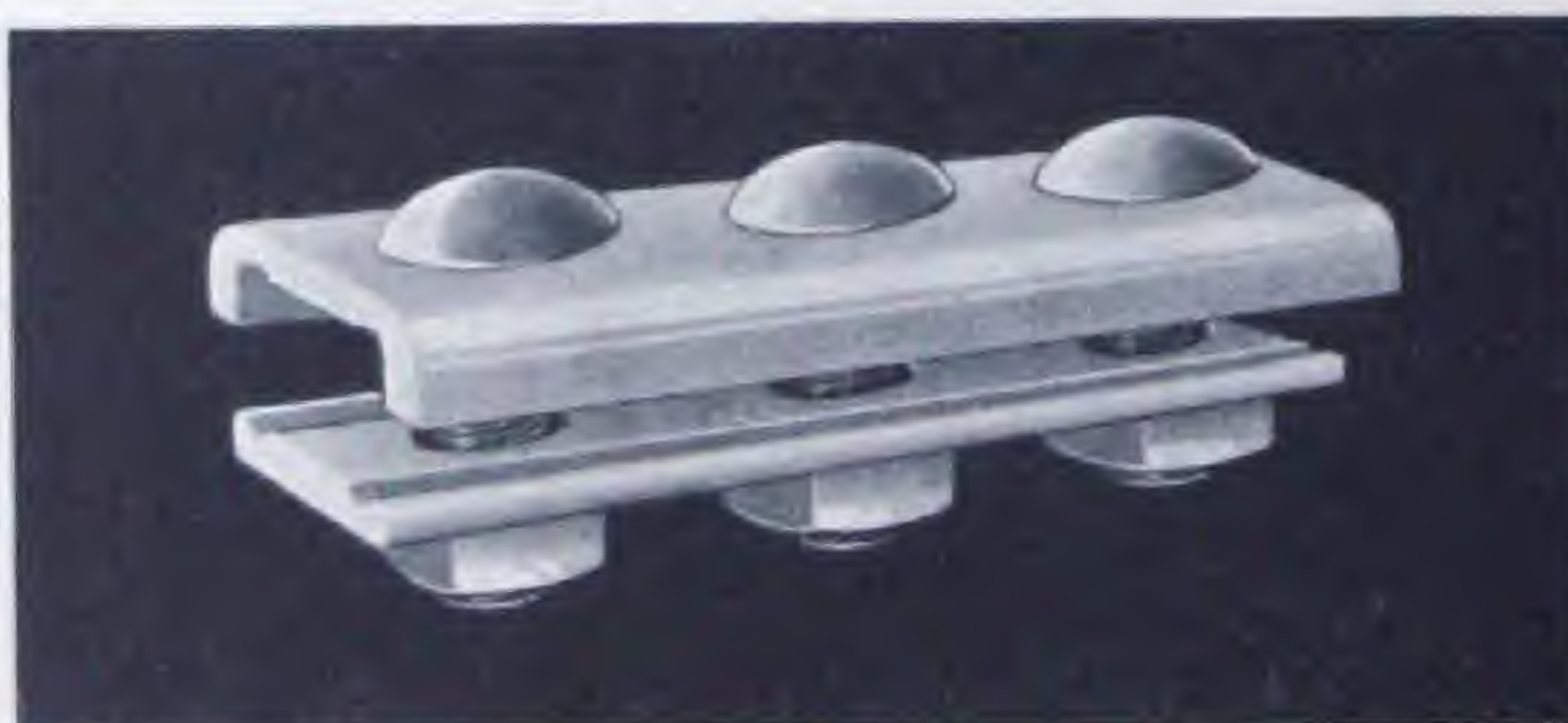


Guy or Anchor Rods can be supplied either Drop Forged or Welded as specified. Each rod is threaded 4 inches long and fitted with one square nut.

Diam. in Inches	List Price per 100	Length in Feet	Inside Dimensions of Eye, Inches		Wgt. per 100 pcs. in Lbs.	Diam. in Inches	List Price per 100	Length in Feet	Inside Dimensions of Eye, Inches		Wgt. per 100 pcs. in Lbs.
			Width	Length					Width	Length	
1/2	\$42.00	5	3/4	1	322	3/4	\$104.00	6	1 1/2	2	909
1/2	47.50	6	3/4	1	376	3/4	116.00	7	1 1/2	2	1058
1/2	53.00	7	3/4	1	432	3/4	128.00	8	1 1/2	2	1211
5/8	66.00	5	1 1/2	2	538	3/4	140.00	9	1 1/2	2	1358
5/8	74.00	6	1 1/2	2	656	1	234.00	8	1 1/2	2	2230
5/8	83.00	7	1 1/2	2	738	1	254.50	10	1 1/2	2	2759
5/8	91.00	8	1 1/2	2	838	1	275.00	12	1 1/2	2	3291

The length of an anchor rod is the distance from the centre of the eye to the end of threaded end.

CHANNEL BACK GUY CLAMP



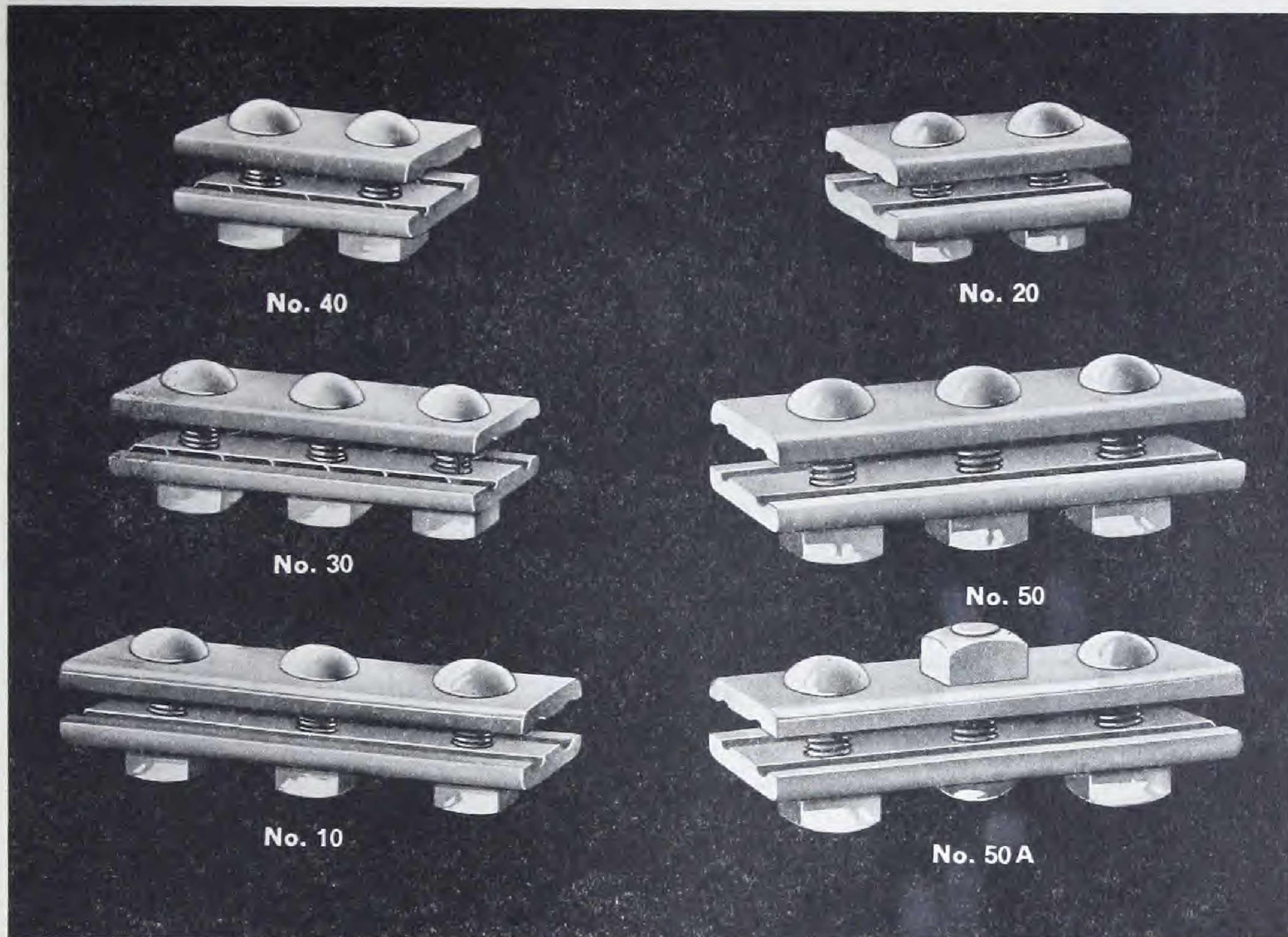
Channel back guy clamps are preferred in many cases because the channel holds the guy wire in place while the clamp is being tightened. Hot rolled. Punched with oval holes in both plates for 1/2" oval neck bolts, making it possible to insert the bolts from either side.

List Price per 100	Type	Width Inches	Length Inches	Size of Strand Inches	Wgt. per 100 pcs. Lbs.
\$27.60	3 bolt	1 3/4	5	5/16 to 7/16	155

POLE LINE HARDWARE—Cont'd

Hot Galvanized

GUY CLAMPS



LIGHT

Hot rolled. Finished to $1\frac{9}{16}$ " wide by $\frac{3}{8}$ " thick. Supplied with $\frac{1}{2}$ " oval neck bolts made of high tensile steel and galvanized by the "Diamond" Process. Plates are punched before galvanizing with oval-shaped holes into which the necks of the bolts fit, to prevent turning when the nuts are being drawn up tight.

No.	List Price per 100	Type	Width	Length	Size of Strand Inches	Wgt. per 100 pcs. lbs.
30	\$21.45	3 bolt	$1\frac{9}{16}$ "	$4\frac{3}{4}$ "	$\frac{5}{16}$ to $\frac{7}{16}$	165
40	16.85	2 "	$1\frac{9}{16}$ "	$3\frac{1}{8}$ "	$\frac{5}{16}$ to $\frac{7}{16}$	105

HEAVY

Hot rolled. Finished to $1\frac{11}{16}$ " wide by $\frac{3}{8}$ " thick. No. 20 is supplied with $\frac{1}{2}$ " oval neck bolts, other heavy styles with $\frac{5}{8}$ " oval neck bolts made of high tensile steel and galvanized by the "Diamond" Process. Plates punched before galvanizing with oval-shaped holes into which the necks of the bolts fit, to prevent turning when the nuts are being drawn up tight.

No.	List Price per 100	Type	Width	Length	Size of Strand Inches	Wgt. per 100 pcs. lbs.
10	\$26.00	3 bolt	$1\frac{9}{16}$ "	6"	$\frac{5}{16}$ x $\frac{1}{2}$	208
20	18.50	2 "	$1\frac{9}{16}$ "	$3\frac{1}{8}$ "	$\frac{5}{16}$ to $\frac{1}{2}$	114
50	37.50	3 "	$1\frac{11}{16}$ "	6"	$\frac{5}{16}$ to $\frac{1}{2}$	251
50A	37.50	3—one reverse	$1\frac{11}{16}$ "	6"	$\frac{5}{16}$ to $\frac{1}{2}$	260

DRIVE HOOKS

Drive Hooks are used for inserting in the mortar between bricks or masonry to carry wires running along the side of buildings.



Standard size is $\frac{5}{16}$ " diameter x 5" long overall and threaded with fether drive screw thread. Price on application.

POLE LINE HARDWARE—Cont'd

Hot Galvanized

INSULATOR PINS

The wood top pin is known as the Western Union Standard. Wood top is boiled in paraffine. Pin is made of high carbon steel to assure stiffness and is provided with square nut and round clipped washer.

Forged steel pins are made of high carbon steel to assure stiffness and are provided with square nut.



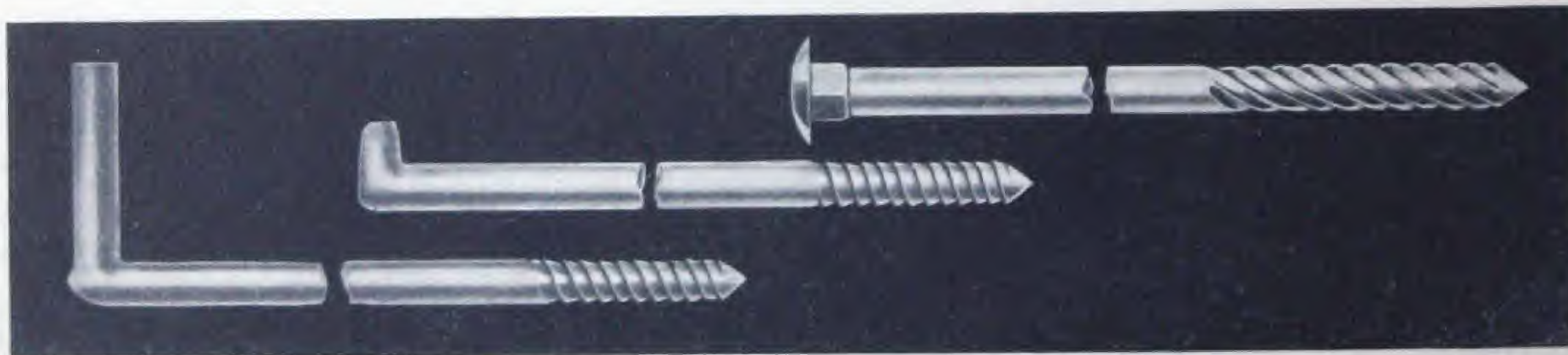
Wood Top Pins
with Steel Bolts
Western Union
Standard

Style	List Price per 100	Diameter in Inches	Length, Inches			Wgt. per 100 Pcs. in Lbs.
			Above Shoulder	Below Shoulder	Overall	
Western Union	\$13.50	$\frac{1}{2}$	$4\frac{1}{4}$	5	$9\frac{1}{4}$	70
Long Shank for Wood Cross Arms						
C.S.	\$16.00	$\frac{5}{8}$	$4\frac{3}{8}$	$5\frac{1}{4}$	$9\frac{5}{8}$	105
Short Shank for Steel Cross Arms						
C.B.	\$15.75	$\frac{5}{8}$	$4\frac{3}{8}$	$1\frac{1}{2}$	$5\frac{7}{8}$	80



Forged
Steel Pins

POLE STEPS



Pole steps for wood poles are made in three styles. The threads used for these steps allow them to be driven without tearing the fibres of the wood.

Standard Hook Head Steps with fether drive thread.
Long Hook Head Steps with fether drive thread.
Button Head Steps with twist drive thread and square neck for wrench hold.

Type	List Price per 100	Diameter Inches	Length Inches overall	Weight per 100 pcs. in Lbs.
Std. Hook Head...	\$10.60	$\frac{9}{16}$	9	70
Std. Hook Head...	11.50	$\frac{5}{8}$	10	$87\frac{1}{2}$
Long Hook Head...	17.50	$\frac{5}{8}$	10	104
Button Head.....	On Application	$\frac{5}{8}$	10	107



POLE LINE HARDWARE—Cont'd

Hot Galvanized

MACHINE BOLTS

Cross Arm Bolts

Through Bolts



Standard List Prices of 100 Bolts with Nuts—Hot Galvanized

Length under Head Inches	$\frac{5}{16}$ Inch Diam.	$\frac{3}{8}$ Inch Diam.	$\frac{1}{2}$ Inch Diam.	$\frac{5}{8}$ Inch Diam.	$\frac{3}{4}$ Inch Diam.
1	\$1.22	\$1.52	\$2.87	....	....
1 $\frac{1}{4}$	1.52	2.87	....	....
1 $\frac{1}{2}$	1.52	2.87	....	....
1 $\frac{3}{4}$	1.68	3.18	....	....
2	1.68	3.18	\$4.98	\$7.19
2 $\frac{1}{2}$	1.83	3.49	5.37	7.75
3	1.98	3.80	5.77	8.31
3 $\frac{1}{2}$	2.14	4.12	6.16	8.87
4	2.29	4.42	6.55	9.42
4 $\frac{1}{2}$	2.75	4.72	6.94	9.99
5	2.92	5.01	7.34	10.55
5 $\frac{1}{2}$	3.09	5.31	7.73	11.12
6	3.26	5.60	8.12	11.69
6 $\frac{1}{2}$	3.99	6.47	8.52	12.26
7	4.16	6.76	8.91	12.82
7 $\frac{1}{2}$	4.33	7.04	9.30	13.39
8	4.50	7.33	9.70	13.96
9	4.85	7.90	10.49	15.07
10	5.19	8.48	11.28	16.18
11	5.53	9.06	12.07	17.29
12	5.87	9.63	12.86	18.41
13	13.65	19.52
14	14.43	20.63
15	15.23	21.75
16	16.01	22.86
17	16.81	23.97
18	17.59	25.09
19	18.39	26.20
20	19.17	27.31
21	19.96	28.42
22	20.75	29.54
23	21.54	30.65
24	22.33	31.77
25	23.12	32.88
26	23.91	34.00
28

Prices for sizes other than shown will be quoted on application.

Approximate Weight in Pounds of 100 Machine Bolts with Nuts—Hot Galvanized.

Diameter	$\frac{5}{16}$ Inch	$\frac{3}{8}$ Inch	$\frac{1}{2}$ Inch	$\frac{5}{8}$ Inch	$\frac{3}{4}$ Inch
Length	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
....
....
....
1 $\frac{1}{2}$	8.8	18	....	....
2	10.2	21	37	58
2 $\frac{1}{2}$	11.6	24	41	64
3	13.0	26	45	70
3 $\frac{1}{2}$	14.4	29	49	76
4	15.8	31	53	82
4 $\frac{1}{2}$	17.2	34	57	88
5	18.6	37	61	94
5 $\frac{1}{2}$	20.	39	65	100
6	21.4	42	69	106
6 $\frac{1}{2}$	22.8	44	73	112
7	24.2	47	77	118
7 $\frac{1}{2}$	25.6	50	81	124
8	27.0	52	85	130
9	29.8	57	93	142
10	32.6	63	101	154
11	35.4	68	109	166
12	38.2	73	118	178
13	126	190
14	134	202
15	142	214
16	150	226
17	158	238
18	166	250
19	175	262
20	183	274
21	191	286
22	199	298
23	207	310
24	215	322
25	223	334
26	231	346
28	370

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POLE LINE HARDWARE—Cont'd

Hot Galvanized

CARRIAGE OR CROSS ARM BRACE BOLTS



Standard List Prices of 100 Bolts with Nuts—Hot Galvanized.

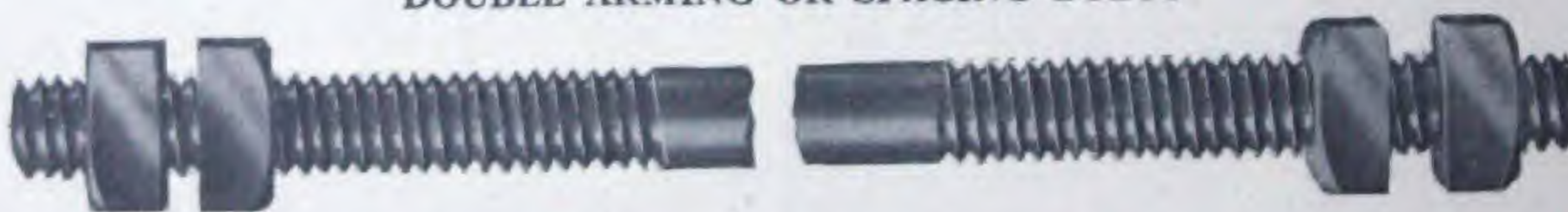
Length under Head Inches	$\frac{3}{16}$ In. Diam.	$\frac{1}{4}$ In. Diam.	$\frac{5}{16}$ In. Diam.	$\frac{3}{8}$ In. Diam.	$\frac{1}{2}$ In. Diam.	$\frac{5}{8}$ In. Diam.	$\frac{3}{4}$ In. Diam.
1½	\$0.70	\$0.70	\$1.01	..	..	..	..
2	.79	.79	1.14	\$1.59	\$2.79	..	..
2¼	1.26	1.76	2.85	..	..
2½	1.26	1.76	2.85	..	..
3	1.39	1.93	3.17	\$5.64	..
3¼	1.51	2.11	3.49	6.04	\$9.33
3½	1.51	2.11	3.49	6.04	9.33
4	2.28	3.80	6.43	9.86
4½	2.45	4.09	6.83	10.40
5	2.62	4.38	7.23	10.93
5½	2.79	4.66	7.63	11.47
6	2.97	4.95	8.03	12.00
6½	3.89	5.72	8.43	12.54
7	4.07	6.02	8.83	13.07
7½	4.26	6.32	9.24	13.61
8	4.44	6.63	9.64	14.14
8½	4.63	6.97	10.03	..
9	4.81	7.12	10.44	..
9½	5.00	7.57	10.71	..
10	5.18	7.81	11.24	..
12	12.82	..
14	14.42	..

Approximate Weight in Pounds of 100 Carriage Bolts with Nuts—Hot Galvanized

Diam.	$\frac{3}{16}$ In.	$\frac{1}{4}$ In.	$\frac{5}{16}$ In.	$\frac{3}{8}$ In.	$\frac{1}{2}$ In.	$\frac{5}{8}$ In.	$\frac{3}{4}$ In.
Length	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
1½	2.4	3.5	5.7	..	..	..	..
2	2.9	4.2	6.7	10.1	..	..	..
2½	7.7	11.5	22.2	..	..
3	8.7	13.0	24.7	44	..
3½	9.7	14.4	27.3	48	69
4	15.8	29.8	52	75
4½	17.2	32.4	56	81
5	18.6	34.9	60	88
5½	20.0	37.5	64	94
6	21.5	40.0	68	100
6½	22.9	42.6	72	106
7	24.3	45.1	77	112
7½	25.7	47.7	81	118
8	27.1	50.2	85	124
9	30.0	55.3	93	..
10	32.8	60.4	101	..
12	117	..
14	133	..

Prices for sizes other than shown will be quoted on application.

DOUBLE ARMING OR SPACING BOLTS



Standard List Prices of 100 Bolts with Four Nuts Hot Galvanized

Length overall in Inches	$\frac{1}{2}$ inch Diameter	$\frac{5}{8}$ inch Diameter	$\frac{3}{4}$ inch Diameter
6	..	..	..
10	\$11.34	..	..
12	12.35	\$18.90	..
14	13.36	20.38	..
16	14.38	21.85	\$30.03
17	14.88	22.59	30.62
18	15.38	23.33	32.02
20	16.40	24.81	34.82
22	..	26.28	37.54
24	..	27.87	40.42
26	..	..	..
30	..	..	..

Approximate Weight in Pounds of 100 Double Arming Bolts with Four Nuts—Hot Galvanized

Diameter	$\frac{1}{2}$ inch	$\frac{5}{8}$ inch	$\frac{3}{4}$ inch
Length	Lbs.	Lbs.	Lbs.
6	..	..	..
10	..	..	..
12	75	144	..
14	84	157	..
16	93	171	270
17	..	..	..
18	101	184	290
20	111	201	309
22	..	214	332
24	..	227	348
26	..	..	..
30	..	..	..

Supplied with two nuts on each end and threaded 4 inches or more on each end.



POLE LINE HARDWARE—Cont'd

Hot Galvanized

EYE BOLTS

Drop Forged or Welded



An eyebolt is measured from the centre of the eye to the tip of the bolt.

The length of thread on standard eye bolts—lengths 8 inches and over are cut threaded 6 inches; 6-inch eyebolts are cut threaded 4 inches. One nut is supplied with each eyebolt.

List Prices of 100 Eyebolts with Nuts—Hot Galvanized

$\frac{1}{2}$ inch diameter				$\frac{3}{8}$ inch diameter				$\frac{1}{4}$ inch diameter			
Size of eye inside $\frac{3}{4}$ " x 1"				Size of eye inside $1\frac{1}{2}$ " x 2"				Size of eye inside $1\frac{1}{2}$ " x 2"			
List Price		Length to Centre of Eye Inches	Approx. Weight per 100 pieces	List Price		Length to Centre of Eye Inches	Approx. Weight per 100 pieces	List Price		Length to Centre of Eye Inches	Approx. Weight per 100 pieces
Drop Forged	Welded			Drop Forged	Welded			Drop Forged	Welded		
\$18.00	\$16.49	6	55	\$22.00	\$20.14	6	84	\$32.00	.....	6	116
19.00	17.58	8	65	24.00	21.85	8	100	34.75	.....	8	140
20.50	18.72	10	75	26.00	23.61	10	116	36.00	\$32.92	10	164
21.75	19.86	12	85	27.75	25.27	12	132	38.75	35.30	12	188
23.00	21.00	14	95	29.50	26.89	14	148	41.50	37.72	14	212
24.25	22.19	16	105	31.25	28.60	16	164	44.00	40.19	16	236
24.50	23.37	18	115	33.25	30.26	18	180	46.50	42.52	18	260
27.00	24.66	20	125	35.00	31.92	20	196	48.25	44.94	20	284

ROUND AND SQUARE WASHERS



Round Washers



Square Washers

List Prices per 100 Lbs.	Dimensions in Inches						List Prices 100 per Lbs.	Dimensions in Inches			
	Outside Diam.	Diam. of Hole	Size Bolt Mach.	Size Bolt Carr.	Thickness	Wgt. Lbs. per 1000		Size Washer	Diam. Hole	Size of Bolt or Rod	Wgt. Lbs. per 1000
\$15.35	1	$\frac{7}{16}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{16}$	16	\$11.90	2 x 2 x $\frac{1}{8}$	$1\frac{1}{16}$	$\frac{1}{2}$ or $\frac{3}{8}$	145
14.50	$1\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{3}{16}$	30	11.90	2 x 2 x $\frac{3}{16}$	$1\frac{1}{16}$	$\frac{1}{2}$ or $\frac{3}{8}$	181
13.80	$1\frac{3}{8}$	$\frac{9}{16}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{7}{16}$	42	10.50	2 x 2 x $\frac{1}{2}$	$1\frac{1}{16}$	$\frac{1}{2}$ or $\frac{3}{8}$	217
13.60	$1\frac{1}{2}$	$1\frac{1}{16}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{1}{2}$	75	10.50	$2\frac{1}{4}$ x $2\frac{1}{4}$ x $\frac{1}{8}$	$1\frac{1}{16}$	$\frac{1}{2}$ or $\frac{3}{8}$	252
13.50	2	$1\frac{3}{16}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{1}{2}$	112	10.50	$2\frac{1}{4}$ x $2\frac{1}{4}$ x $\frac{1}{4}$	$1\frac{1}{16}$	$\frac{3}{8}$ or $\frac{1}{2}$	246
							10.50	$2\frac{1}{4}$ x $2\frac{1}{4}$ x $\frac{3}{8}$	$1\frac{1}{16}$	$\frac{3}{8}$ or $\frac{1}{2}$	240
							10.50	$2\frac{3}{4}$ x $2\frac{3}{4}$ x $\frac{1}{8}$	$1\frac{1}{16}$	$\frac{1}{2}$ or $\frac{3}{8}$	312
							10.50	3 x 3 x $\frac{1}{8}$	$1\frac{1}{16}$	$\frac{1}{2}$ or $\frac{3}{8}$	627
							10.50	3 x 3 x $\frac{1}{4}$	$1\frac{1}{16}$	$\frac{3}{8}$	606
							10.50	3 x 3 x $\frac{1}{2}$	$1\frac{1}{16}$	$\frac{1}{2}$ or $\frac{3}{8}$	585
							10.50	3 x 3 x $\frac{3}{4}$	$\frac{3}{8}$	$\frac{3}{4}$	564
							10.50	4 x 4 x $\frac{1}{2}$	$1\frac{3}{4}$	1	2125

POLE LINE HARDWARE—Cont'd

Hot Galvanized
LAG OR COACH SCREWS

Square Heads



Gimlet Points

Standard List Price per 100—Hot Galvanized.

Length under Head Inches	1/4 Inch Diam.	5/16 Inch Diam.	3/8 Inch Diam.	1/2 Inch Diam.	5/8 Inch Diam.
2	\$1.52	\$1.52	\$1.92	\$2.69	....
2 1/2	1.66	1.66	2.14	2.98	....
3	1.81	1.81	2.35	3.27	\$4.70
3 1/2	1.96	1.96	2.57	3.55	5.09
4	2.10	2.10	2.78	3.84	5.47
4 1/2	2.25	2.25	3.00	4.13	5.85
5	....	2.40	3.21	4.41	6.23
5 1/2	....	....	....	4.70	6.61
6	....	....	....	4.99	6.99
7	....	....	....	6.10	7.75

Approximate Weight per 100 in pounds.

Length under Head Inches	1/4 Inch Diam.	5/16 Inch Diam.	3/8 Inch Diam.	1/2 Inch Diam.	5/8 Inch Diam.
2	3.5	4.4	7.1	15.0	26.3
2 1/2	4.2	5.3	8.5	17.3	29.9
3	4.7	6.2	9.8	19.5	33.5
3 1/2	5.2	7.1	11.1	21.6	37.1
4	5.7	8.0	12.5	23.8	40.7
4 1/2	6.5	9.0	13.8	26.3	44.5
5	....	10.0	14.9	28.8	48.3
5 1/2	....	....	....	31.3	52.0
6	....	....	....	33.8	55.7
7	....	....	....	38.9	....

TWIST DRIVE SCREW



Standard List Price per 100—Hot Galvanized.

Length under Head Inches	1/4 Inch Diam.	5/16 Inch Diam.	3/8 Inch Diam.	1/2 Inch Diam.	5/8 Inch Diam.
4	\$2.78	\$3.84	....
4 1/2	4.13	....

Approximate Weight per 100 in pounds.

Length under Head Inches	1/4 Inch Diam.	5/16 Inch Diam.	3/8 Inch Diam.	1/2 Inch Diam.	5/8 Inch Diam.
4	12.5	23.8	....
4 1/2	26.3	....

FETTER DRIVE SCREW



Standard List Price per 100—Hot Galvanized.

Length under Head Inches	1/4 Inch Diam.	5/16 Inch Diam.	3/8 Inch Diam.	1/2 Inch Diam.	5/8 Inch Diam.
2 1/4	\$2.14	....	....
2 1/2	\$1.66	2.14	....	....
3	2.35	\$3.27	....
3 1/2	2.57	3.55	....
4	2.78	3.84	....
4 1/2	4.13	....
5	4.41	....
6 1/2	5.81	....

Approximate Weight per 100 in pounds.

Length under Head Inches	1/4 Inch Diam.	5/16 Inch Diam.	3/8 Inch Diam.	1/2 Inch Diam.	5/8 Inch Diam.
2 1/4
2 1/2	5.3	8.5	....	....
3	9.8	19.5	....
3 1/2	11.1	21.6	....
4	12.5	23.8	....
4 1/2	26.3	....
5	28.8	....
6 1/2



SPIKES



Spike Manufacturing Department at Hamilton Works

Facilities are located at Hamilton, Toronto and Montreal for manufacturing spikes. Close control of methods and materials gives full assurance of efficiency in production. Railway track spikes form a large portion of our production and are made from the bar to finished spike on the most up-to-date automatic equipment.

At each of the above plants warehouses contain large stocks ready for shipping instructions.

PRESSED OR SHIP SPIKES



List of Extras adopted Jan. 2, 1925

Size, Inches Square	Length, Inches	Extra over Base per 100 Lbs.
$\frac{1}{4}$	4 to 8 incl.	\$1.25
$\frac{5}{16}$	4 " 8 "	.90
$\frac{3}{8}$	4 " 12 "	.70
$\frac{7}{16}$	6 " 12 "	.60
$\frac{1}{2}$	6 " 12 "	.50
$\frac{5}{8}$	8 " 12 "	.50
$\frac{3}{4}$	12 " 14 "	.50

Base Price quoted on Application

Net Extras

Quantities less than 100 lbs. of a size, 50 cents per 100 lbs.

Sizes not enumerated take extra of nearest size plus 25 cents net extra per 100 lbs.

Galvanizing extra on application.

Approximate Number per 100 lbs.

Size	Length, Inches									
	4	4½	5	6	7	8	9	10	11	12
$\frac{1}{4}$	1300	1230	1110	910						
$\frac{5}{16}$	860	770	720	600	510					
$\frac{3}{8}$	470		400	339	291	257	233	215		183
$\frac{7}{16}$			292	244	221	200	170	158		
$\frac{1}{2}$			226	195	170	149	131	120		104
$\frac{5}{8}$					128	107	96	84		74
$\frac{3}{4}$										

Pressed Spikes are packed in Kegs containing 100 lbs. or 200 lbs. as ordered.



SPIKES—Cont'd.
DRIFT OR WHARF SPIKES

SQUARE



No. 1. Shear Point, Button Head



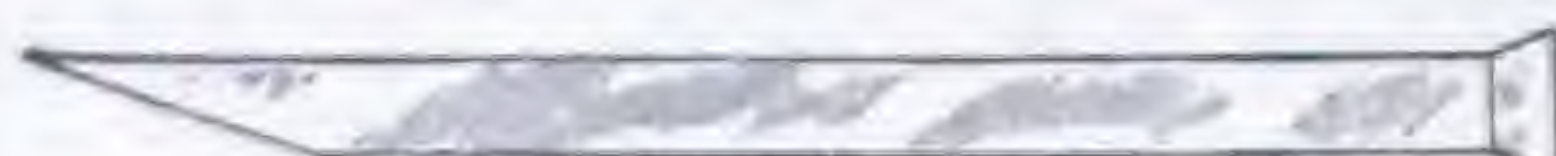
No. 2. Wedge Point, Button Head



No. 4. Shear Point, Headless



No. 5. Wedge Point, Headless



No. 7. Shear Point, Countersunk Head



No. 8. Wedge Point, Countersunk Head

ROUND



No. 10. Shear Point, Button Head



No. 20. Wedge Point, Button Head



No. 40. Shear Point, Headless



No. 50. Wedge Point, Headless



No. 70. Shear Point, Countersunk Head



No. 80. Wedge Point, Countersunk Head

Prices on Application

RAILROAD TRACK AND SHIMMING SPIKES

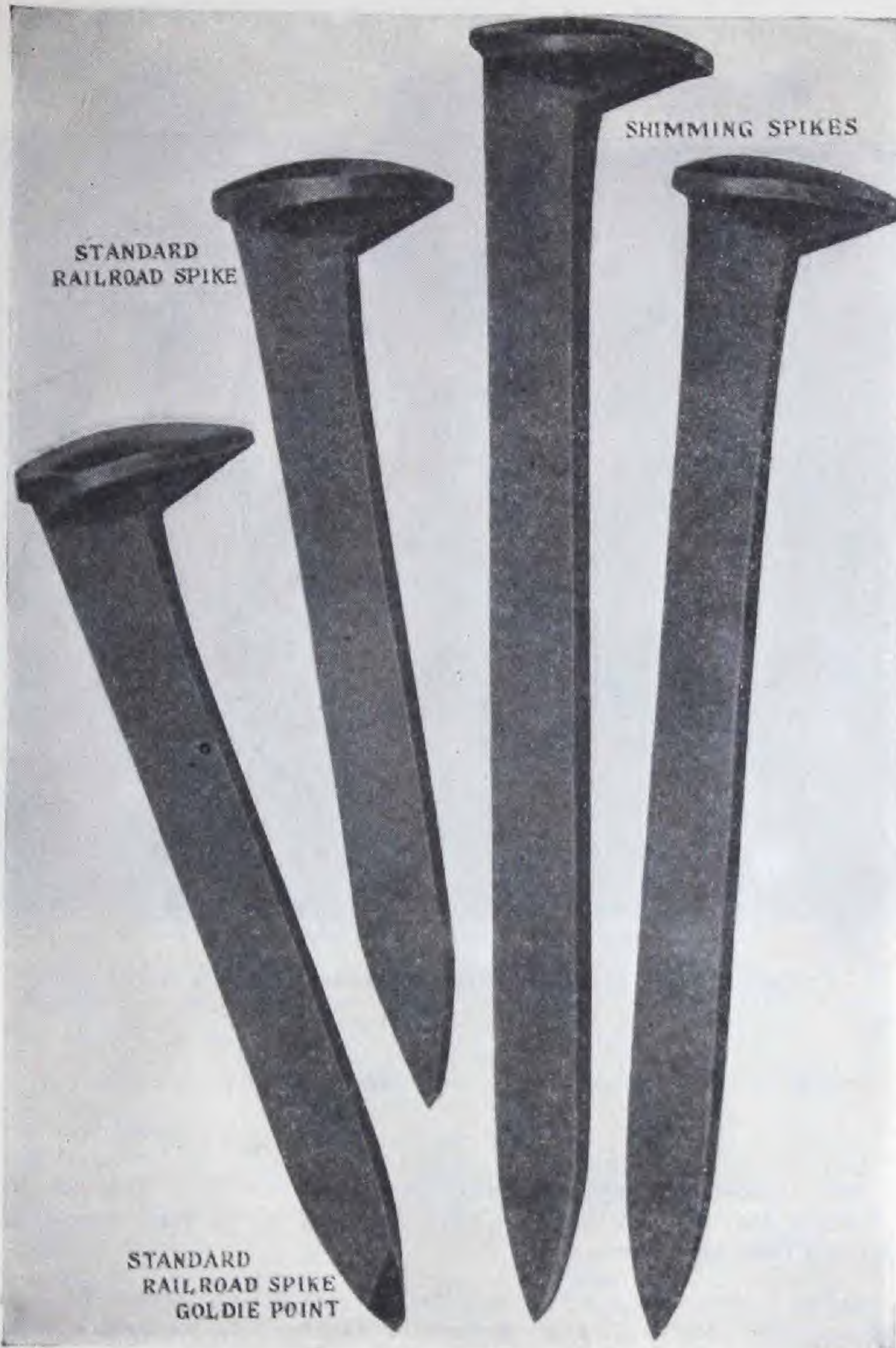
Approximate Number in a Cask or Keg

Length measured under Head in Inches	Approx. Number per Cask of 224 Lbs.	Approx. Number per Keg of 100 Lbs.	Length measured under Head in Inches	Approx. Number per Cask of 224 Lbs.	Approx. Number per Keg of 100 Lbs.
9 x $\frac{5}{8}$	172	...	4 $\frac{1}{2}$ x $\frac{1}{2}$	...	236
9 x $\frac{9}{16}$	196	...	4 $\frac{1}{2}$ x $\frac{7}{16}$	...	314
9 x $\frac{1}{2}$	239	...	4 $\frac{1}{2}$ x $\frac{3}{8}$	...	418
8 x $\frac{9}{16}$	216	...	4 x $\frac{1}{2}$	...	257
8 x $\frac{1}{2}$	262	...	4 x $\frac{7}{16}$	...	339
7 x $\frac{9}{16}$	241	...	4 x $\frac{3}{8}$	...	458
6 $\frac{1}{2}$ x $\frac{9}{16}$	262	...	3 $\frac{1}{2}$ x $\frac{1}{2}$	...	296
6 x $\frac{5}{8}$	248	...	3 $\frac{1}{2}$ x $\frac{7}{16}$	...	378
6 x $\frac{9}{16}$	290	...	3 $\frac{1}{2}$ x $\frac{3}{8}$	...	500
5 $\frac{1}{2}$ x $\frac{5}{8}$	295	...	3 x $\frac{1}{2}$	...	324
5 $\frac{1}{2}$ x $\frac{9}{16}$	347	...	3 x $\frac{7}{16}$	...	417
5 x $\frac{5}{8}$	...	122	3 x $\frac{3}{8}$	...	561
5 x $\frac{9}{16}$	...	163	3 x $\frac{5}{16}$	...	748
5 x $\frac{1}{2}$	...	217	2 $\frac{1}{2}$ x $\frac{3}{8}$	...	701
			2 $\frac{1}{2}$ x $\frac{5}{16}$	...	935



SPIKES—Cont'd

RAILROAD TRACK AND SHIMMING SPIKES



RAILROAD TRACK SPIKES

Small sizes
packed in 100 lb.
and 200 lb. Kegs
Standard Sizes
 $\frac{5}{8} \times 5\frac{1}{2}$
 $\frac{3}{4} \times 5\frac{1}{2}$
packed in 224
lb. casks.

SHIMMING SPIKES

Packed in Casks
of 224 lbs.
or
Kegs of 112 lbs.

RAILROAD TRACK SPIKES

SHIMMING SPIKES

Size	Length Inches	Advance over Base per 100 lbs.
$\frac{5}{8}$	5, $5\frac{1}{2}$, 6	Prices on Application
$\frac{9}{16}$	$4\frac{1}{2}$, 5, $5\frac{1}{2}$, 6	
$\frac{1}{2}$	4, $4\frac{1}{2}$, 5	
$\frac{1}{2}$	3, $3\frac{1}{2}$	
$\frac{7}{16}$	$3\frac{1}{2}$, 4, $4\frac{1}{2}$	
$\frac{3}{8}$	3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$	
$\frac{3}{8}$	$2\frac{1}{2}$	
$\frac{5}{16}$	2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$	
$\frac{9}{16}$ & $\frac{5}{8}$	Goldie Points	

Size	Length Inches	Advance over Base of Railroad Spikes per 100 lbs.
$\frac{1}{2}$	8, 9	Prices on Application
$\frac{9}{16}$	7, 8, 9	
$\frac{5}{8}$	$6\frac{1}{2}$, 7, $7\frac{1}{2}$, 8, $8\frac{1}{2}$, 9	

For approximate number in Cask or Keg see preceding page

11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

RIVETS



Cold Heading Machines, Rivet Department, Canada Works

We manufacture an exceptionally wide variety of styles and sizes of Rivets at our four plants, located at Hamilton, Toronto, Montreal and Brantford. We also carry well balanced stocks of standard sizes for prompt shipment from any of these points.

As in other lines we manufacture, every process, from the making of pig iron to the finished rivets, is carried on within our own plants. This control over the manufacturing processes is your assurance of uniform quality at all times.

Heating of Rivets

Faulty heating is one of the main causes of rivet breakage. Our metallurgists have compiled some interesting information on the heating of rivets which appears on page 112. This data is the result of practical investigations carried on in a number of shops and should prove helpful to anyone engaged in this class of work.



RIVETS—Cont'd

BOILER, BRIDGE, SHIP AND STRUCTURAL RIVETS



Round Head



Cone Head



Countersunk Head

Our rivets are made from a special grade of soft open-hearth steel of our own manufacture, possessing a high percentage of elongation, combined with maximum strength.

*Round Head and Cone Head Rivets are measured under the head;
Countersunk Head Rivets are measured overall.*

LIST OF BASE SIZES AND EXTRAS

(Revised January 2, 1924)

Base Sizes

$\frac{3}{4}$ inch to $1\frac{1}{8}$ inch diameter, longer than 2 inch and up to $4\frac{15}{16}$ inch in length inclusive. Above in packages weighing 200 pounds or more.

Standard Extras

	Per 100 lbs.
$\frac{1}{2}$ " diameter.....	\$0.75
$\frac{5}{8}$ " diameter.....	.35
$\frac{9}{16}$ ", $1\frac{1}{16}$ ", $1\frac{3}{16}$ ", $1\frac{5}{16}$ " and $1\frac{1}{2}$ ", subject to same diameter extra as nearest smaller diameter, plus 25c net per 100 lbs.....	
Rivets larger than $1\frac{1}{8}$ " diameter.....	.25
Lengths 1" and shorter.....	.75
Lengths longer than 1" up to and including 2".....	.25
Lengths 5" and longer.....	.50
Swell necks.....	.25
Annealing rivets for cold driving.....	.50
Reinforcing kegs or packing in bags for export, 25c net extra per package.	
Packing in boxes for export, price on application.	
Cone-head rivets.....	.20
Steeple-head rivets.....	.45
Countersunk-head rivets.....	.45
Pan-head rivets.....	.45

Special shaped or sized heads other than style and standard above listed, price on application.
Cost of testing and inspection, if any, to be at customer's expense.

Net Extras

	Per 100 lbs.
If ordered in 100 pound packages.....	\$0.40
100 to 199 pounds of a size.....	.40
26 to 99 pounds of a size.....	1.00
25 pounds of a size or less.....	2.00



RIVETS—Cont'd

BOILER RIVETS

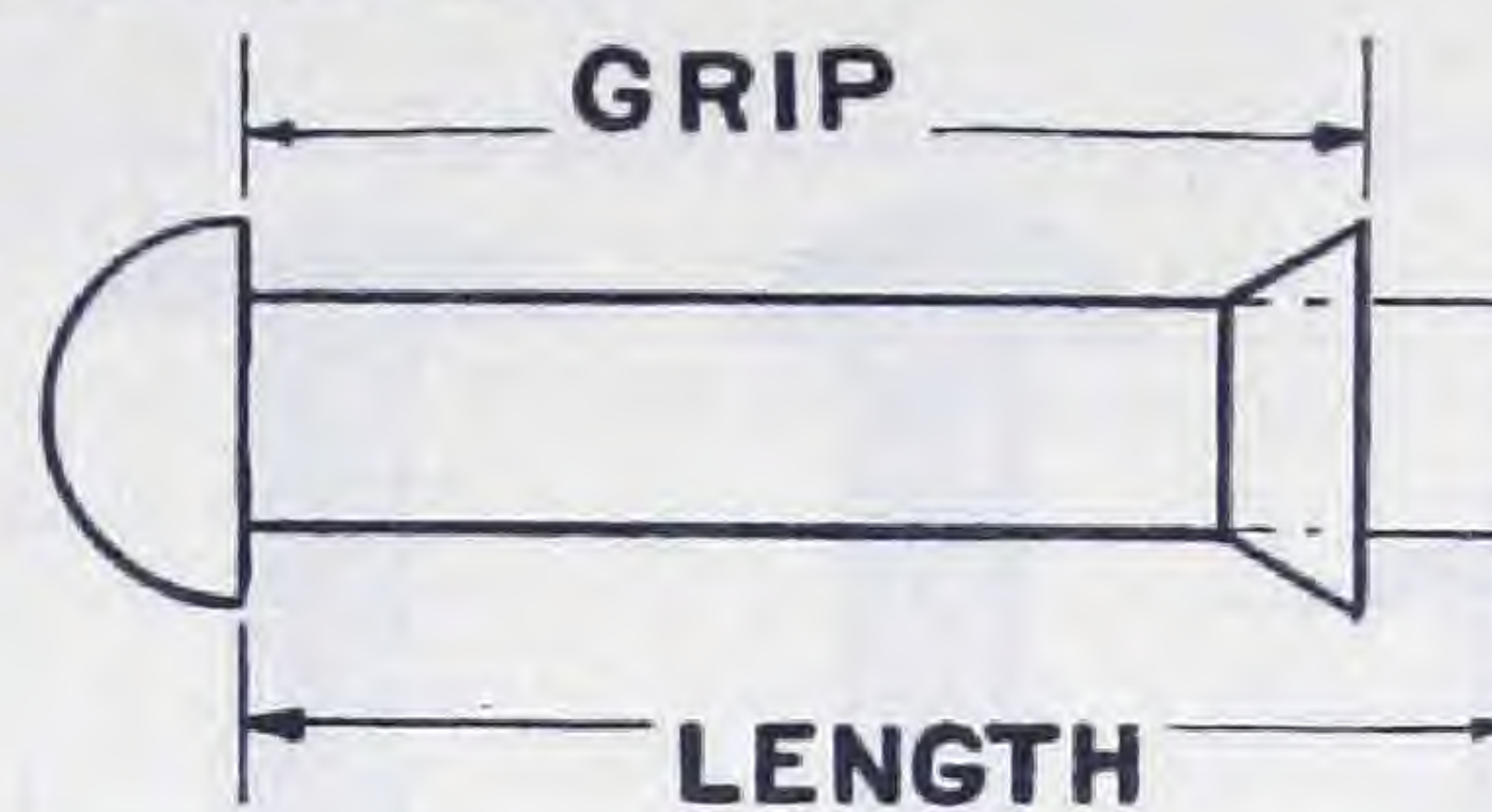
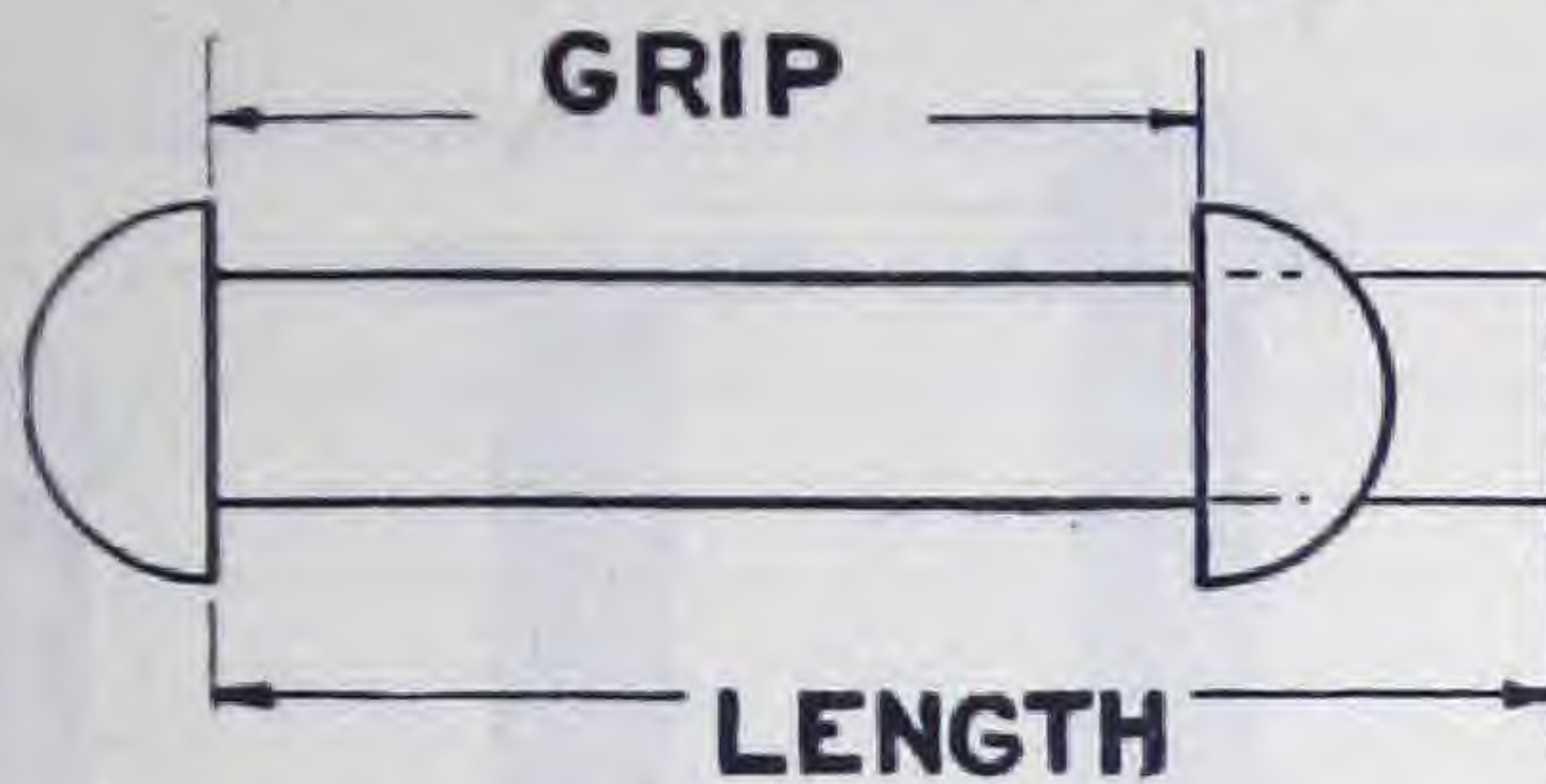
Estimated number of round or cone head rivets in 200 pounds.

Length Inches	Diameter of Rivets, Inches								
	$\frac{1}{2}$	$\frac{9}{16}$	$\frac{5}{8}$	$1\frac{1}{16}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$
$\frac{3}{4}$	2,286	1,459	1,234						
$\frac{7}{8}$	2,138	1,388	1,161						
1.....	2,000	1,315	1,096	921	753				
$1\frac{1}{8}$	1,868	1,250	1,037	865	714				
$1\frac{1}{4}$	1,754	1,190	984	816	679	434	333		
$1\frac{3}{8}$	1,652	1,136	937	772	647	416	317	210	
$1\frac{1}{2}$	1,562	1,087	894	732	618	400	307	204	150
$1\frac{5}{8}$	1,481	1,041	854	696	591	384	298	198	145
$1\frac{3}{4}$	1,408	1,000	818	664	567	370	289	192	141
$1\frac{7}{8}$	1,342	961	785	635	545	357	281	186	138
2.....	1,282	926	755	607	524	344	270	181	134
$2\frac{1}{8}$	1,226	893	726	583	505	333	259	175	130
$2\frac{1}{4}$	1,176	862	700	560	487	322	250	169	127
$2\frac{3}{8}$	1,129	833	676	539	470	312	241	165	124
$2\frac{1}{2}$	1,086	806	653	519	455	302	232	161	121
$2\frac{5}{8}$	1,047	781	632	501	440	294	224	157	118
$2\frac{3}{4}$	1,010	757	612	484	426	285	217	153	115
$2\frac{7}{8}$	975	735	593	468	414	277	210	150	113
3.....	943	714	575	453	402	270	204	145	110
$3\frac{1}{8}$	913	694	559	439	390	263	198	141	108
$3\frac{1}{4}$	885	673	543	426	379	256	194	138	105
$3\frac{3}{8}$	858	653	528	414	369	250	188	135	103
$3\frac{1}{2}$	833	634	514	402	360	243	185	132	101
$3\frac{5}{8}$	809	617	501	391	351	238	180	129	99
$3\frac{3}{4}$	787	600	488	381	342	232	177	126	97
$3\frac{7}{8}$	766	584	476	371	334	227	172	123	95
4.....	746	568	465	361	325	222	169	121	93
$4\frac{1}{8}$	727	554	454	352	318	217	165	118	92
$4\frac{1}{4}$	709	542	444	344	311	212	161	116	90
$4\frac{3}{8}$	692	529	434	336	304	208	157	113	88
$4\frac{1}{2}$	675	518	424	328	297	204	153	111	87
$4\frac{5}{8}$	660	506	415	321	291	200	150	109	85
$4\frac{3}{4}$	645	496	406	314	285	196	147	107	84
$4\frac{7}{8}$	630	485	392	307	279	192	143	105	83
5.....	617	476	390	300	274	188	140	103	81
$5\frac{1}{8}$	604	466	382	294	268	185	137	101	80
$5\frac{1}{4}$	591	457	375	289	263	181	135	100	78
$5\frac{3}{8}$	579	448	368	283	258	178	132	98	77
$5\frac{1}{2}$	568	440	361	277	253	175	129	97	76
$5\frac{5}{8}$	557	431	354	272	249	172	127	95	74
$5\frac{3}{4}$	546	424	348	267	244	169	125	94	73
$5\frac{7}{8}$	536	416	342	262	240	166	122	93	72
6.....	526	409	336	257	236	163	120	91	71

RIVETS—Cont'd

LENGTHS OF RIVETS REQUIRED FOR VARIOUS GRIPS

Including amount necessary to form one head.



Grip Inches	Diameter of Rivets, Inches							
	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$
$\frac{1}{2}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$				
$\frac{5}{8}$	$1\frac{1}{8}$	$1\frac{3}{8}$	$1\frac{5}{8}$	$1\frac{7}{8}$				
$\frac{3}{4}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2				
$\frac{7}{8}$	$1\frac{3}{8}$	$1\frac{5}{8}$	$1\frac{7}{8}$	$2\frac{1}{8}$				
1	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{3}{8}$	$2\frac{1}{2}$	$2\frac{5}{8}$	$2\frac{3}{4}$
$1\frac{1}{8}$	$1\frac{5}{8}$	$1\frac{7}{8}$	$2\frac{1}{8}$	$2\frac{3}{8}$	$2\frac{1}{2}$	$2\frac{5}{8}$	$2\frac{3}{4}$	$2\frac{7}{8}$
$1\frac{1}{4}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{5}{8}$	$2\frac{3}{4}$	$2\frac{7}{8}$	3
$1\frac{3}{8}$	$1\frac{7}{8}$	$2\frac{1}{8}$	$2\frac{3}{8}$	$2\frac{5}{8}$	$2\frac{7}{8}$	3	3	$3\frac{1}{8}$
$1\frac{1}{2}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{8}$	$3\frac{1}{8}$	$3\frac{1}{4}$
$1\frac{5}{8}$	$2\frac{1}{8}$	$2\frac{3}{8}$	$2\frac{5}{8}$	$2\frac{7}{8}$	$3\frac{1}{8}$	$3\frac{1}{4}$	$3\frac{1}{4}$	$3\frac{1}{2}$
$1\frac{3}{4}$	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{4}$	$3\frac{3}{8}$	$3\frac{1}{2}$	$3\frac{5}{8}$
$1\frac{7}{8}$	$2\frac{3}{8}$	$2\frac{5}{8}$	$2\frac{7}{8}$	$3\frac{1}{4}$	$3\frac{3}{8}$	$3\frac{1}{2}$	$3\frac{5}{8}$	$3\frac{3}{4}$
2	$2\frac{1}{2}$	$2\frac{3}{4}$	$3\frac{1}{8}$	$3\frac{3}{8}$	$3\frac{1}{2}$	$3\frac{5}{8}$	$3\frac{3}{4}$	$3\frac{7}{8}$
$2\frac{1}{8}$	$2\frac{5}{8}$	$2\frac{7}{8}$	$3\frac{1}{4}$	$3\frac{1}{2}$	$3\frac{5}{8}$	$3\frac{3}{4}$	$3\frac{7}{8}$	4
$2\frac{1}{4}$	$2\frac{3}{4}$	3	$3\frac{3}{8}$	$3\frac{5}{8}$	$3\frac{3}{4}$	$3\frac{7}{8}$	4	$4\frac{1}{8}$
$2\frac{3}{8}$	$2\frac{7}{8}$	$3\frac{1}{8}$	$3\frac{1}{2}$	$3\frac{3}{4}$	$3\frac{7}{8}$	4	$4\frac{1}{8}$	$4\frac{1}{4}$
$2\frac{1}{2}$	3	$3\frac{1}{4}$	$3\frac{5}{8}$	$3\frac{7}{8}$	4	$4\frac{1}{8}$	$4\frac{1}{4}$	$4\frac{3}{8}$
$2\frac{5}{8}$	$3\frac{1}{8}$	$3\frac{1}{2}$	$3\frac{3}{4}$	4	$4\frac{1}{8}$	$4\frac{1}{4}$	$4\frac{3}{8}$	$4\frac{1}{2}$
$2\frac{3}{4}$	$3\frac{1}{4}$	$3\frac{5}{8}$	$3\frac{7}{8}$	$4\frac{1}{8}$	$4\frac{1}{4}$	$4\frac{3}{8}$	$4\frac{1}{2}$	$4\frac{5}{8}$
$2\frac{7}{8}$	$3\frac{3}{8}$	$3\frac{3}{4}$	4	$4\frac{1}{4}$	$4\frac{3}{8}$	$4\frac{1}{2}$	$4\frac{5}{8}$	$4\frac{3}{4}$
3	$3\frac{1}{2}$	$3\frac{7}{8}$	$4\frac{1}{8}$	$4\frac{3}{8}$	$4\frac{1}{2}$	$4\frac{5}{8}$	$4\frac{3}{4}$	$4\frac{7}{8}$
$3\frac{1}{8}$		4	$4\frac{1}{4}$	$4\frac{1}{2}$	$4\frac{3}{4}$	$4\frac{3}{4}$	5	5
$3\frac{1}{4}$		$4\frac{1}{8}$	$4\frac{3}{8}$	$4\frac{3}{4}$	$4\frac{7}{8}$	5	$5\frac{1}{8}$	$5\frac{1}{4}$
$3\frac{3}{8}$		$4\frac{1}{4}$	$4\frac{1}{2}$	$4\frac{7}{8}$	5	$5\frac{1}{8}$	$5\frac{1}{4}$	$5\frac{3}{8}$
$3\frac{1}{2}$		$4\frac{3}{8}$	$4\frac{5}{8}$	5	$5\frac{1}{8}$	$5\frac{1}{4}$	$5\frac{3}{8}$	$5\frac{1}{2}$
$3\frac{5}{8}$		$4\frac{1}{2}$	$4\frac{3}{4}$	$5\frac{1}{8}$	$5\frac{1}{4}$	$5\frac{3}{8}$	$5\frac{1}{2}$	$5\frac{5}{8}$
$3\frac{3}{4}$		$4\frac{5}{8}$	$4\frac{7}{8}$	$5\frac{1}{4}$	$5\frac{3}{8}$	$5\frac{1}{2}$	$5\frac{5}{8}$	$5\frac{3}{4}$
$3\frac{7}{8}$		$4\frac{3}{4}$	5	$5\frac{3}{8}$	$5\frac{1}{2}$	$5\frac{5}{8}$	$5\frac{3}{4}$	$5\frac{7}{8}$
4		$4\frac{7}{8}$	$5\frac{1}{8}$	$5\frac{1}{2}$	$5\frac{5}{8}$	$5\frac{3}{4}$	$5\frac{7}{8}$	6
$4\frac{1}{8}$			$5\frac{1}{4}$	$5\frac{5}{8}$	$5\frac{3}{4}$	$5\frac{7}{8}$	6	$6\frac{1}{8}$
$4\frac{1}{4}$			$5\frac{1}{2}$	$5\frac{3}{4}$	$5\frac{7}{8}$	6	$6\frac{1}{8}$	$6\frac{1}{4}$
$4\frac{3}{8}$			$5\frac{5}{8}$	$5\frac{7}{8}$	6	$6\frac{1}{8}$	$6\frac{1}{4}$	$6\frac{3}{8}$
$4\frac{1}{2}$			$5\frac{3}{4}$	6	$6\frac{1}{8}$	$6\frac{1}{4}$	$6\frac{3}{8}$	$6\frac{1}{2}$
$4\frac{5}{8}$			$5\frac{7}{8}$	$6\frac{1}{8}$	$6\frac{1}{4}$	$6\frac{3}{8}$	$6\frac{1}{2}$	$6\frac{5}{8}$
$4\frac{3}{4}$			6	$6\frac{1}{4}$	$6\frac{1}{2}$	$6\frac{5}{8}$	$6\frac{3}{4}$	$6\frac{3}{4}$
$4\frac{7}{8}$			$6\frac{1}{8}$	$6\frac{1}{2}$	$6\frac{5}{8}$	$6\frac{3}{4}$	$6\frac{7}{8}$	$6\frac{7}{8}$
5			$6\frac{1}{4}$	$6\frac{5}{8}$	$6\frac{3}{4}$	$6\frac{7}{8}$	7	7
$5\frac{1}{8}$				$6\frac{3}{4}$	$6\frac{7}{8}$	7	$7\frac{1}{8}$	$7\frac{1}{8}$
$5\frac{1}{4}$				$6\frac{7}{8}$	7	$7\frac{1}{8}$	$7\frac{1}{4}$	$7\frac{1}{4}$
$5\frac{3}{8}$				7	$7\frac{1}{8}$	$7\frac{1}{4}$	$7\frac{3}{8}$	$7\frac{3}{8}$
$5\frac{1}{2}$				$7\frac{1}{8}$	$7\frac{1}{4}$	$7\frac{3}{8}$	$7\frac{1}{2}$	$7\frac{1}{2}$
$5\frac{5}{8}$				$7\frac{1}{4}$	$7\frac{3}{8}$	$7\frac{1}{2}$	$7\frac{5}{8}$	$7\frac{5}{8}$
$5\frac{3}{4}$				$7\frac{3}{8}$	$7\frac{5}{8}$	$7\frac{5}{8}$	$7\frac{3}{4}$	$7\frac{3}{4}$
$5\frac{7}{8}$				$7\frac{1}{2}$	$7\frac{3}{4}$	$7\frac{3}{4}$	$7\frac{7}{8}$	$7\frac{7}{8}$
6				$7\frac{5}{8}$	$7\frac{7}{8}$	$7\frac{7}{8}$	8	$8\frac{1}{8}$

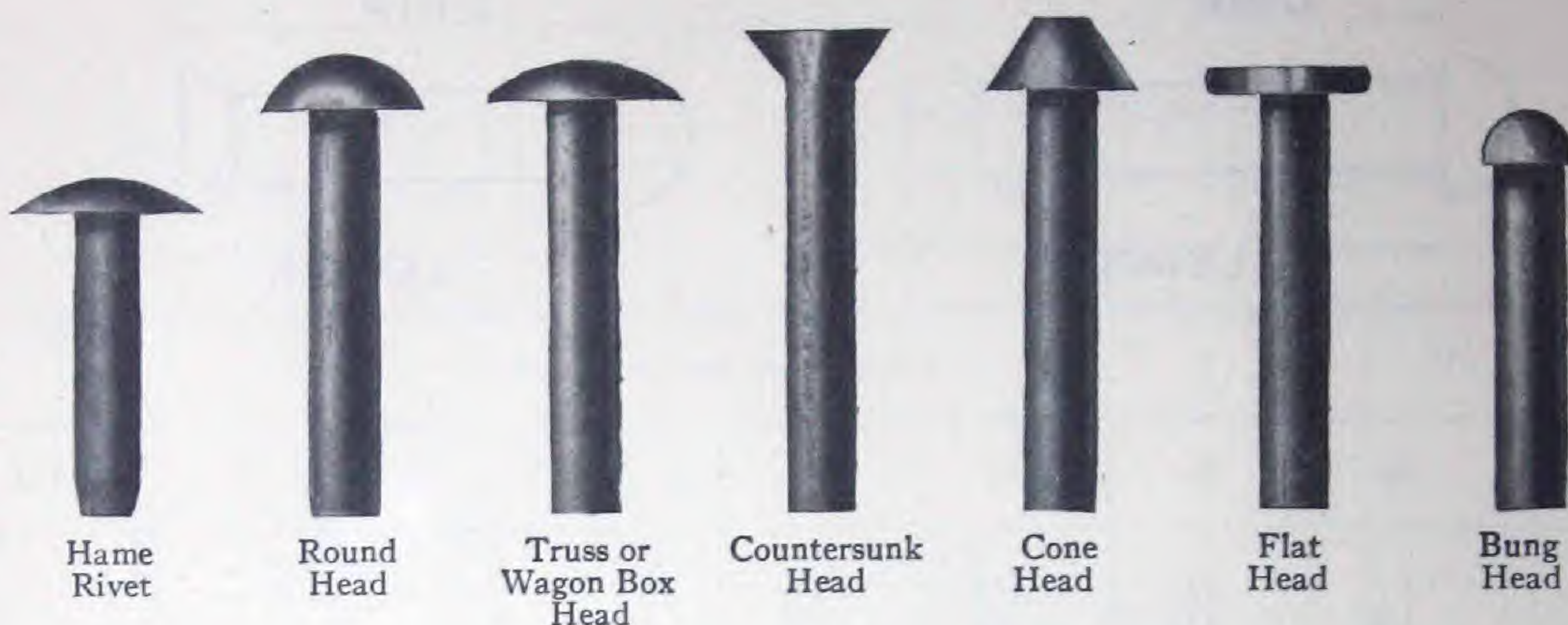
Amount in Inches to be deducted for Countersunk Heads

$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	$\frac{7}{8}$
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RIVETS—Cont'd

STANDARD RIVETS



List Prices per Pound in 200 Pound Kegs for any style rivet as illustrated above.

Adopted August 9, 1920.

Diameter		Length in Inches															
Inches	B.W.G.	6 to 3 3/4	3 1/2 to 2 1/4	2 to 1	7/8 to 3/4	5/8 to 1/2	7/16	3/8	1 1/32	5/16	9/32	1/4	7/32	3/16	5/32	1/8	3/32
7/16		17	17	15	15 1/2	16	17	18	19	20	20						
3/8		17	17	15	15 1/2	16	17	18	19	20	20						
1 1/32		18 1/2	17 1/2	15 1/2	16	16 1/2	17	18	19	20	20						
5/16		18 1/2	17 1/2	15 1/2	16	16 1/2	18	18	19	20	20						
1		19	18	16	16 1/2	17	19	19	19	20	20						
9/32 or 2		19	18	16	16 1/2	17	19	19	19	20	20	20	21				
3		19	18	16	16 1/2	17	19	19	19	20	20	20	21				
1/4		19	18	16	16 1/2	17	19	19	19	20	20	20	21	21			
4		22	20	17	17 1/2	18	19	20	20	20	20	20	21	21	22		
7/32 or 5		22	20	17	17 1/2	18	20	20	20	21	22	22	23	23	24	24	25
6		22	20	17	17 1/2	18	20	21	21	22	22	23	24	25	25	25	26
3/16		22	20	17	17 1/2	18	20	21	21	22	22	23	24	25	26	27	28
7				17	17 1/2	19	20	21	21	22	22	23	24	25	26	27	28
5/32 or 8				18	18 1/2	19	21	22	22	23	23	24	25	26	27	28	29
9				19	19 1/2	20	22	23	23	25	25	25	26	27	29	31	32
10				20	20 1/2	21	23	25	27	29	30	30	32	35	37	39	40
1/8 or 11				21	21 1/2	22	26	29	30	32	33	33	35	39	42	44	47
12				22	22 1/2	23	28	31	32	34	36	37	38	43	47	52	57
3/32 or 13				26	26 1/2	27	32	36	37	39	41	42	43	47	52	57	62
14				28	28 1/2	29	37	42	47	52	54	57	60	60	62	65	67

The following Extras are a part of the Rivet List:

100 Pound Kegs.....add 1c. to List
 50 Pound Boxes.....add 3c. to List
 25 Pound Boxes.....add 4c. to List
 5 or 10 Pound Packages.....add 5c. to List
 1 Pound Packages.....add 8c. to List

*Lengths other than Standard and Special Heads,
 prices quoted on application.*

Copper Rivets can also be furnished in the above standard styles. Prices quoted on application.

Extra price for Hot or Wash Tinning, Copper Plating, Brass Plating, Hot or Electro Galvanizing, Cadmium Plating, and other finishes, on application.

The general list of rivets as shown in the above list, in standard Round, Flat, Truss or Wagon Box, Bung, Cone or Countersunk Head, and Hame Rivets, shall be considered as standard



RIVETS—Cont'd

STANDARD RIVETS

Approximate Number per pound

Note: This table is furnished as a convenience for estimating purposes only and does not guarantee that a pound of rivets contains the exact number stated

Length Inches	Diameter B.W.G. or Inches													
	7/16	3/8	11/32	5/16	1	2	3	1/4	4	5	6	3/16	7	8
3/8											154	188	221	256
1/2	21	32	42	51	57	65	75	80	89	108	131	159	185	215
5/8	19	29	37	45	50	57	67	70	78	94	114	138	158	185
3/4	17	26	33	41	45	51	59	63	70	84	101	122	139	163
7/8	16	24	30	37	41	46	54	57	63	75	91	109	123	145
1	15	22	28	34	37	42	49	52	57	68	82	98	111	131
1 1/8	14	20	26	31	34	39	45	47	53	63	75	90	101	119
1 1/4	13	19	24	29	32	36	42	44	49	58	69	83	93	109
1 3/8	12	18	22	27	29	33	39	41	45	54	64	76	86	101
1 1/2	11 1/2	17	21	25	28	31	37	38	42	51	59	71	80	94
1 3/4	10 1/2	15	18	22	24	27	33	34	40	44	55	63	70	82
2	9 1/2	13	17	20	22	25	29	30	35	40	47	56	62	73
2 1/4	8 1/2	12	15	18	19	22	27	28	32	36	42	50	56	66
2 1/2	7 1/2	11	14	17	18	20	24	25	29	33	39	46	50	60
2 3/4	6 1/2	10	13	15	17	19	22	23	26	30	36	42	46	55
3	5 1/2	9	12	14	15	17	21	22	24	28	33	39	43	51
3 1/4		8 1/2	11	13	14	16	19	20	23	26	31	36	40	47
3 1/2		8	10 1/2	12	13 1/2	15	18	19	21	24	29	34	38	44
3 3/4		7 1/2	9 3/4	11 3/4	12 3/4	14	17	18	20	23	27	32	35	41
4		7 1/4	9 1/4	11	12	13	16	17	18	21	25	30	33	38
4 1/4		7	8 3/4	10 1/2	11 1/4	12 3/4	15	16	17	20	24			
4 1/2		6 1/2	8 1/4	10	10 3/4	12	14	15	16	19	23			
4 3/4		6 1/4	8	9 1/4	10	11 1/2	13 3/4	14 3/4	15 3/4	18	22			
5		6	7 1/2	9	9 3/4	11	13	14	15	17	21			
5 1/4		5 3/4	7 1/4	8 1/2	9 1/4	10 1/2	12 1/2	13 1/2	14 1/2	16 1/2	20			
5 1/2		5 1/2	7	8 1/4	9	10	12	13	14	16	19			
5 3/4		5 1/4	6 3/4	7 3/4	8 1/2	9 1/2	11 1/2	12 1/2	13 1/2	15	17			
6		5	6 1/2	7 1/2	8 1/4	9 1/4	11	12	13	14	18			

WHEEL RIVETS



No.	Length Inches	Diameter		Per Pound	No.	Length Inches	Diameter		Per Pound
		B.W.G.	Inch				B.W.G.	Inch	
0	1 9/16	5	.220	\$0.21	13	2 1/8	2	.284	\$0.20
1	1 5/8	5	.220	.21	21	2 1/4	2	.284	.20
3	1 3/4	5	.220	.21	33	2 3/8	00	.380	.19
9	1 15/16	4	.238	.21	36	2 5/8	00	.380	.19

Special lengths and diameters made to order.

The following extras are a part of the Wheel Rivets List:—

100 Pound Kegs.....	add 1c. to list	5 or 10 Pound Packages.....	add 5c. to list
50 Pound Boxes.....	add 3c. to list	1 Pound Packages.....	add 8c. to list
25 Pound Boxes.....	add 4c. to list		

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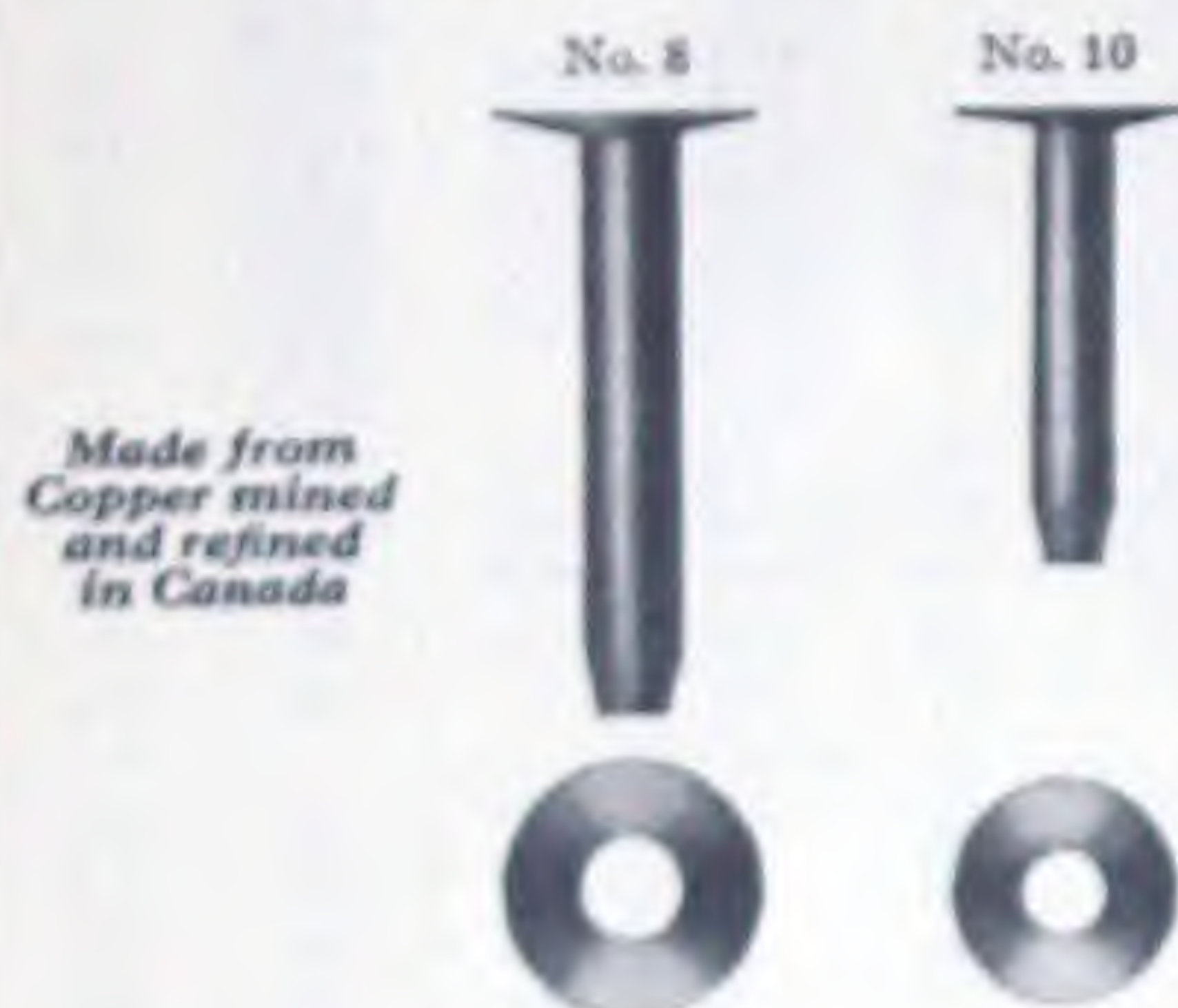
RIVETS—Cont'd

BUTT PINS

Made for all sizes of butts and hinges. Always made to order of any gauge of shank and shape and size of head required.

Prices on application.

COPPER BELT RIVETS AND BURRS



LENGTHS MADE

$\frac{1}{4}$ " to $\frac{5}{8}$ " advancing by $\frac{1}{16}$ th inches.
 $\frac{3}{4}$ " to $1\frac{1}{2}$ " " " $\frac{1}{8}$ th "

PRICE LIST PER POUND

B.W.G. No.	Uniform Lengths packed in 1 lb. Boxes	Uniform Lengths packed in $\frac{1}{2}$ lb. Boxes	Assorted Lengths $\frac{5}{8}$ " to $\frac{3}{4}$ " packed in $\frac{1}{2}$ lb. boxes, 5 lb. Cartons
7	\$0.49	\$0.52	\$0.55
8	.50	.53	.56
9	.52	.55	.58
10	.54	.57	.60
11	.56	.59	.62
12	.58	.61	.64
13	.60	.63	.66
14	.65	.68	.71
15	.70	.73	.76

Each box contains an equal number of rivets and burrs.

*We will also make up special assortments.
Prices on application.*

Copper Rivets and Burrs are also supplied separately, usually packed in $\frac{1}{2}$ lb. and 1 lb. boxes.

Special Pattern Copper Rivets and Burrs in quantities less than 50 lbs. of a size, prices on application.

IRON BELT RIVETS AND BURRS

Lengths Made

$\frac{1}{4}$ " to $\frac{5}{8}$ " advancing by $\frac{1}{16}$ th inches
 $\frac{3}{4}$ " to $1\frac{1}{2}$ " " " $\frac{1}{8}$ th "

PRICE LIST PER POUND

Tinned or Coppered

B.W.G. No.	Uniform Lengths 1 lb. Boxes	Uniform Lengths $\frac{1}{2}$ lb. Boxes	Assorted $\frac{5}{8}$ " to $\frac{3}{4}$ " in $\frac{1}{2}$ lb. Boxes 5 lb. Cartons	Assorted $\frac{3}{8}$ " to $\frac{1}{2}$ " in $\frac{1}{4}$ lb. Boxes 5 lb. Cartons
7	\$0.35	\$0.39	\$0.43	\$0.47
8	.36	.40	.44	.48
9	.37	.41	.45	.49
10	.39	.43	.47	.51
11	.41	.45	.49	.53
12	.45	.49	.53	.57
13	.48	.52	.56	.60
14	.51	.55	.59	.63

Each box contains an equal number of Rivets and Burrs.

The price of Belt Rivets without Burrs is taken from the Standard Rivet List.

The price of Burrs without Rivets is taken from the Iron Burr List.

IRON BURRS

Packed in Kegs

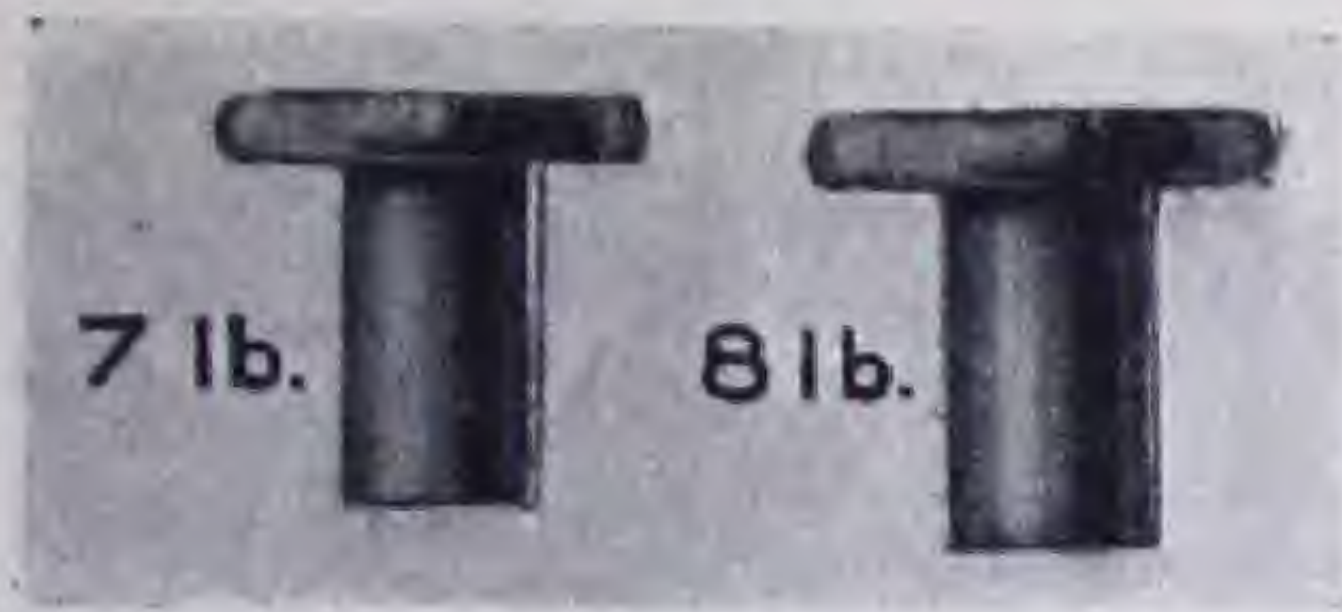
Diameter of Hole to fit rivets of these Dimensions	B. W. G. No. or Inches													
	$\frac{3}{8}$ to $\frac{1}{4}$	4	5	6	$\frac{3}{16}$	7	8	9	10	11	12	13	14	
Price per Pound	.32	.33	.34	.38	.38	.39	.40	.41	.43	.46	.56	.66	.76	

Extra Price for Hot or Wash Tinning, Copper Plating, Brass Plating, Hot or Electro Galvanizing, Cadmium Plating, and other finishes, on application.

List Extras for packing same as for Small Rivets.

RIVETS—Cont'd

THOUSAND OR TINNERS RIVETS



Approximate Dimensions

Size	Length Inch	B.W.G. No.	Size	Length Inch	B.W.G. No.
8 oz.	$\frac{5}{32}$	$13\frac{1}{4}$	4 lb.	$11\frac{1}{32}$	$7\frac{1}{4}$
10 "	$\frac{11}{64}$	13	5 "	$\frac{3}{8}$	$6\frac{3}{4}$
12 "	$\frac{3}{16}$	$12\frac{1}{4}$	6 "	$\frac{25}{64}$	6
14 "	$\frac{3}{16}$	12	7 "	$\frac{13}{32}$	$5\frac{1}{4}$
1 lb.	$\frac{13}{64}$	$11\frac{3}{4}$	8 "	$\frac{7}{16}$	$4\frac{3}{4}$
$1\frac{1}{4}$ "	$\frac{7}{32}$	11	9 "	$\frac{29}{64}$	$4\frac{1}{4}$
$1\frac{1}{2}$ "	$\frac{15}{64}$	$10\frac{1}{4}$	10 "	$\frac{15}{32}$	4
$1\frac{3}{4}$ "	$\frac{1}{4}$	10	12 "	$\frac{1}{2}$	3
2 "	$\frac{17}{64}$	$9\frac{1}{4}$	14 "	$\frac{33}{64}$	2
$2\frac{1}{2}$ "	$\frac{9}{32}$	9	16 "	$\frac{17}{32}$	1
3 "	$\frac{5}{16}$	$8\frac{1}{4}$	18 "	$\frac{9}{16}$	$5\frac{1}{16}$ "
$3\frac{1}{2}$ "	$\frac{21}{64}$	8	20 "	$\frac{19}{32}$	0

Sizes 16 lb., 18 lb. and 20 lb. run approximately 830, 790 and 720 rivets respectively to the given weight.

Price List
Adopted August 9, 1920.

Size	List Price per Thousand in Packages Black	List Price per Pound in Bulk, in Kegs Black	
		Flat Head not Pointed	Flat Count- ersunk Head & Pointed
8 oz.	\$0.32	\$0.52	\$0.56
10 "	.36	.49	.53
12 "	.41	.46	.50
14 "	.45	.43	.47
1 lb.	.48	.40	.44
$1\frac{1}{4}$ "	.54	.35	.39
$1\frac{1}{2}$ "	.62	.33	.37
$1\frac{3}{4}$ "	.67	.30	.34
2 "	.72	.28	.32
$2\frac{1}{2}$ "	.83	.25	.29
3 "	.96	.24	.28
$3\frac{1}{2}$ "	1.09	.23	.27
4 "	1.20	.22	.26
5 "	1.30	.21	.25
6 "	1.50	.20	.24
7 "	1.75	.20	.24
8 "	2.00	.20	.24
9 "	2.20	.19	.23
10 "	2.40	.19	.23
12 "	2.64	.17	.21
14 "	3.08	.17	.21
16 "	3.52	.17	.21
18 "	3.78	.16	.20
20 "	4.20	.16	.20

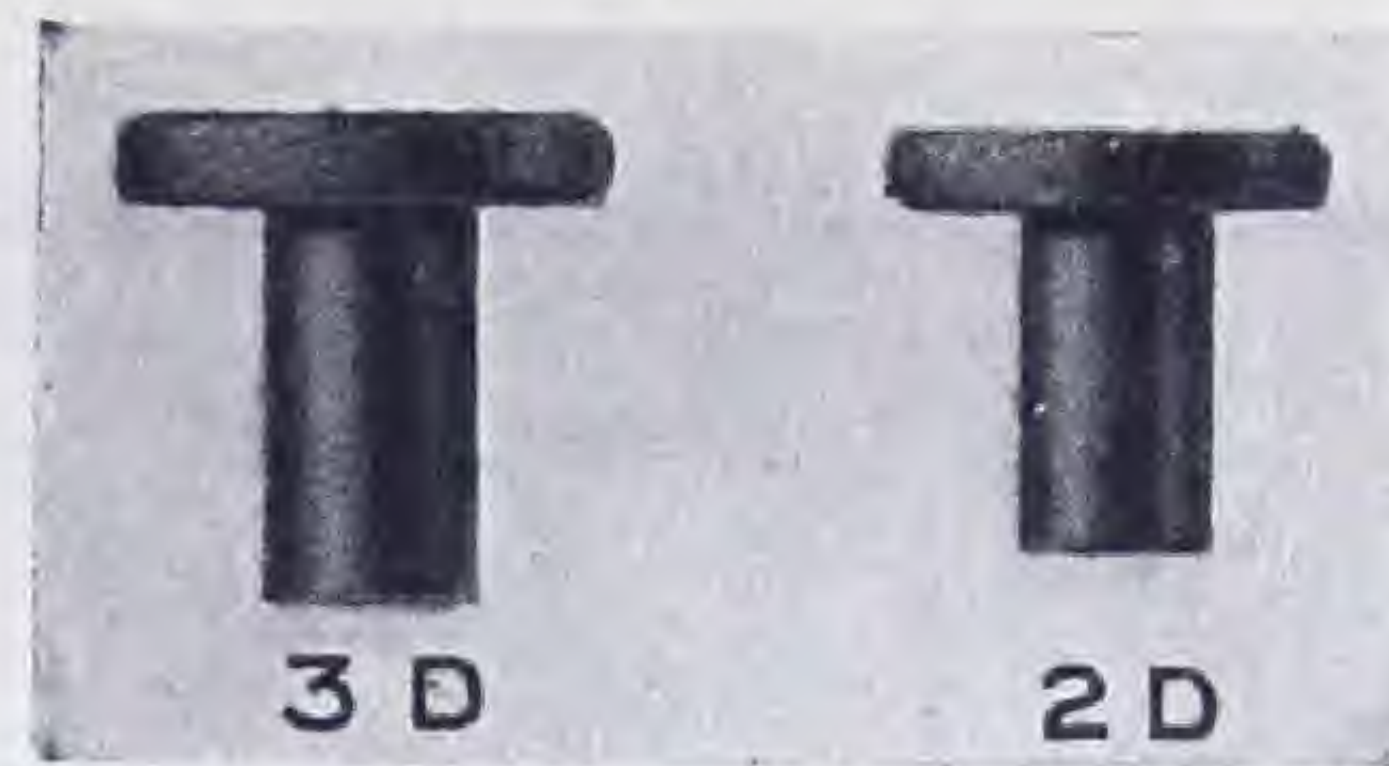
The following Extras are a part of the Tinnert's Rivet List:

- 100 Pound Kegs.....add 1c. to list
- 50 Pound Boxes.....add 3c. to list
- 25 Pound Boxes.....add 4c. to list
- 5 or 10 Pound Packages.....add 5c. to list
- 1 Pound Packages.....add 8c. to list

Extra for Metallic Tinning or Wash Tinning quoted on application.

COOPERS' RIVETS

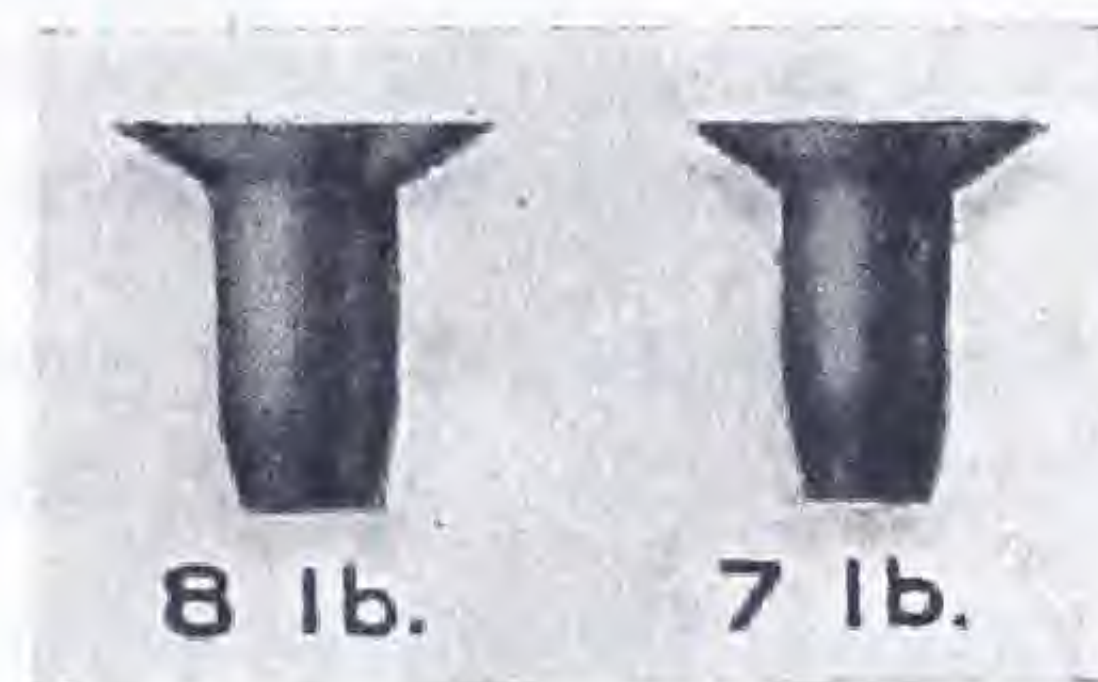
Black



Size d	Length Inch	Diameter B.W.G. No.	List Price per thousand in packages
1d	$\frac{13}{32}$	4	\$2.00
2d	$\frac{7}{16}$	3	2.64
3d	$\frac{15}{32}$	2	3.08
4d	$\frac{17}{32}$	1	3.52
5d	$\frac{19}{32}$	0	3.78
6d	$\frac{11}{16}$	00	4.20

BARREL RIVETS

Black



Size Pound	Length Inch	Diameter B.W.G. No.	List Price per Lb.
5	$\frac{3}{8}$	$6\frac{3}{4}$	\$0.21
6	$\frac{25}{64}$	6	.20
7	$\frac{13}{32}$	$5\frac{1}{4}$	.20
8	$\frac{7}{16}$	$4\frac{3}{4}$	.20
9	$\frac{29}{64}$	$4\frac{1}{4}$	.19
10	$\frac{15}{32}$	4	.19

The following Extras apply to the Coopers' Rivet List, also to Barrel Rivet List:

- 100 Pound Kegs.....add 1c. to list
- 50 Pound Boxes.....add 3c. to list
- 25 Pound Boxes.....add 4c. to list
- 5 or 10 Pound Packages.....add 5c. to list
- 1 Pound Packages.....add 8c. to list

Extra for Metallic Tinning or Wash Tinning quoted on application.

CHISEL POINT RIVETS

Chisel Point Rivets will be made up to order with Round, Countersunk or Special Heads as required.

SHOULDER RIVETS

Shoulder Rivets are not carried in stock, but will be made up promptly to order.



RIVETS—*Cont'd*

SPECIAL COPPER RIVETS

We are prepared to make copper rivets of any size or shape. On receipt of information giving particulars as to size, shape, and quantity required, we will quote promptly.

NOTES ON HEATING RIVETS

Investigation of 'Breakage of Rivets' covering various shops developed the information that high temperature of heating furnaces contributed considerably towards this cause. The different types, with their characteristics, may be divided as follows:

Coal or Coke Forges: Usually the fuel bed is not kept deep enough and the hot rivet is subjected to the direct action of the flame made by the air blast—overheating results. A few seconds under this flame and the rivet is burned. When burning occurs it is easily recognized by characteristic sparks.

Oil Forges: Usually a high pressure air burner is used with a pressure of 80 to 100 pounds per square inch. With this pressure uniform combustion and furnace condition are difficult. Sometimes small inadequate furnaces are used, necessitating a temperature as high as 2,300 degrees or more, to heat the required number of rivets. Either case lends itself to harmful overheating.

Gas Forges: Gas is generally conceded to be a better fuel than oil, coal, or coke due to the lower air pressure required and the resulting easier control of furnace temperature.

Electric Heaters: By this method, because of the radiation of heat away from the surface, the color of the outside does not represent the temperature of the rivet throughout. Lack of consideration of this difference of temperature, between the interior and exterior of the rivet, usually produces overheating.

Heating rivets to over 1,950 degrees F. produces a structure which will not withstand rapid alternate compression and tension. These opposing stresses produce strains which result in intergranular weaknesses and ruptures.

Rivets heated to high temperatures and later to alternate compression and tension, if they do not break in driving, their physical properties are destroyed to such an extent as to render them unfit for service.

High temperatures combined with alternate compression and tension generally termed 'vibration' are the cause of rivets breaking in hammer driving.

Rivets heated to 1,950 degrees F. maximum limit, and a sufficient time allowed for soaking, will drive just as easily and fill the hole equally as well as a rivet heated to a much higher temperature.

Rivets which 'run,' 'give off sparks' or 'split' should never be driven.

CARRIAGE HARDWARE



Drop Forging Department, Gananoque Works

Carriage hardware has been manufactured at our Gananoque Plants for a period of over fifty years. During this period much of the development and standardization of Canadian designs has been carried on in these plants in co-operation with leading carriage builders.

The raw material for our output is secured, in the form of special quality steel forging bars, from our Hamilton Works, where the bars are produced to specification from the ore.

The Gananoque Plants are specially equipped for the production of carriage hardware and are manned by a staff composed of men who have been "brought up" in the business.

Quality steel and high class workmanship are the assets back of Stelco Carriage Hardware—well balanced stocks await your orders.

At these plants we are also in a position to manufacture a wide variety of special light forgings and invite enquiries for any special requirements.

CARRIAGE HARDWARE—Cont'd

"SUPERIOR" AXLE CLIPS



No. 1001—Straight Edge Pattern

List of July 1st, 1905

Size No.	Size of Shank (Inches)	Length of Flat (Inches)	Width of Flat (Inches)	Price per 100
2½	5/16	2½	7/8	\$ 7.00
2¾	5/16	2¾	7/8	7.00
3	5/16	3	7/8	7.00
3¼	5/16	3¼	7/8	7.00
3½	5/16	3½	7/8	7.50
3¾	5/16	3¾	7/8	8.00
4	5/16	4	7/8	8.50
4¼	5/16	4¼	7/8	9.00
4½	5/16	4½	7/8	9.50
4¾	5/16	4¾	7/8	10.00
5	5/16	5	7/8	10.50
5¼	5/16	5¼	7/8	11.00
5½	5/16	5½	7/8	11.50
6	5/16	6	7/8	12.50
6½	5/16	6½	7/8	13.50

In ordering give article and size numbers.

Packed fifty pieces in a box.

"SUPERIOR" AXLE CLIPS



No. 1003—Point Centre Pattern

List of July 1st, 1905

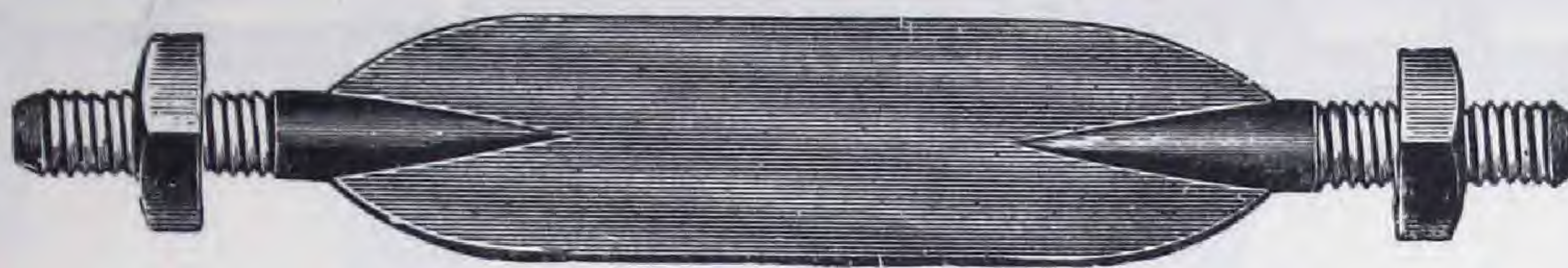
Size No.	Size of Shanks (Inches)	Length of Flat (Inches)	Width of Flat (Inches)	Width at Points (Inches)	Price per 100
3	5/16	3	¾	1½	\$8.00

In ordering give article and size numbers.

Packed fifty pieces in a box.

CARRIAGE HARDWARE—Cont'd

"SUPERIOR" AXLE CLIPS



No. 1005—Heavy Pattern

List of July 1st, 1905

Size No.	Size of Shanks (Inches)	Length of Flat (Inches)	Width of Flat (Inches)	Price per 100
3	$\frac{3}{8}$	3	$1\frac{1}{8}$	\$8.00
3½	$\frac{3}{8}$	3½	$1\frac{1}{8}$	9.50
4	$\frac{3}{8}$	4	$1\frac{1}{8}$	11.00
4½	$\frac{3}{8}$	4½	$1\frac{1}{8}$	12.50
5	$\frac{3}{8}$	5	$1\frac{1}{8}$	14.00
5½	$\frac{3}{8}$	5½	$1\frac{1}{8}$	15.50
6	$\frac{3}{8}$	6	$1\frac{1}{8}$	17.00
6½	$\frac{3}{8}$	6½	$1\frac{1}{8}$	18.50
7	$\frac{3}{8}$	7	$1\frac{1}{8}$	20.00
7½	$\frac{3}{8}$	7½	$1\frac{1}{8}$	21.50
8	$\frac{3}{8}$	8	$1\frac{1}{4}$	23.00
9	$\frac{3}{8}$	9	$1\frac{1}{4}$	24.00
10	$\frac{3}{8}$	10	$1\frac{1}{4}$	25.00

In ordering give article and size numbers.

Packed fifty pieces in a box.



No. 1006—Extra Heavy Pattern

List of July 1st, 1905

New Trade No.	Size of Shanks (Inches)	Length of Flat (Inches)	Width of Flat (Inches)	Price per 100
5	$\frac{7}{16}$	5	$1\frac{5}{8}$	\$16.50
6	$\frac{7}{16}$	6	$1\frac{5}{8}$	20.50
7	$\frac{7}{16}$	7	$1\frac{5}{8}$	24.50
8	$\frac{7}{16}$	8	$1\frac{5}{8}$	28.50
9	$\frac{7}{16}$	9	$1\frac{5}{8}$	32.50
10	$\frac{7}{16}$	10	$1\frac{5}{8}$	36.50

In ordering give article and size numbers.

Packed fifty pieces in a box.

13
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24
25

CARRIAGE HARDWARE—Cont'd

BREWSTER SIDE BAR CLIPS



No. 1009—Straight Edge Pattern

List July 5th, 1905

Shanks—Long end, 2 inches; short end, 1¼ inches.

Size No.	Size of Shanks (Inches)	Length of Flat (Inches)	Width of Flat (Inches)	Price per 100
3	5/16	3	7/8	\$ 8.00
3¾	5/16	3¾	7/8	9.50
4¼	5/16	4¼	7/8	10.50
4¾	5/16	4¾	7/8	11.50

In ordering give article and size numbers.

Packed fifty pieces in a box.



No. 1011—Point Centre Pattern

List July 5th, 1905

Shanks—Long end, 2 inches; short end, 1¼ inches.

Size No.	Size of Shanks (Inches)	Length of Flat (Inches)	Width of Flat (Inches)	Width at Points (Inches)	Price per 100
3	5/16	3	7/8	1½	\$ 9.00
3¾	5/16	3¾	7/8	1½	10.50

In ordering give article and size numbers.

Packed fifty pieces in a box.

SLEIGH OR CUTTER CLIPS



No. 1015—Straight Edge Pattern

List July 5th, 1905

Size No.	Size of Shanks (Inches)	Length of Flat (Inches)	Width of Flat (Inches)	Price per 100
2B	¼	2	5/8	\$ 6.00
2¼B	¼	2¼	5/8	6.25
2½B	¼	2½	5/8	6.50
2¾B	¼	2¾	5/8	6.75
3B	¼	3	5/8	7.00

In ordering give article and size numbers

Packed fifty pieces in a box.

CARRIAGE HARDWARE—Cont'd

BODY HANGER CLIPS

List of Sept. 1st, 1906

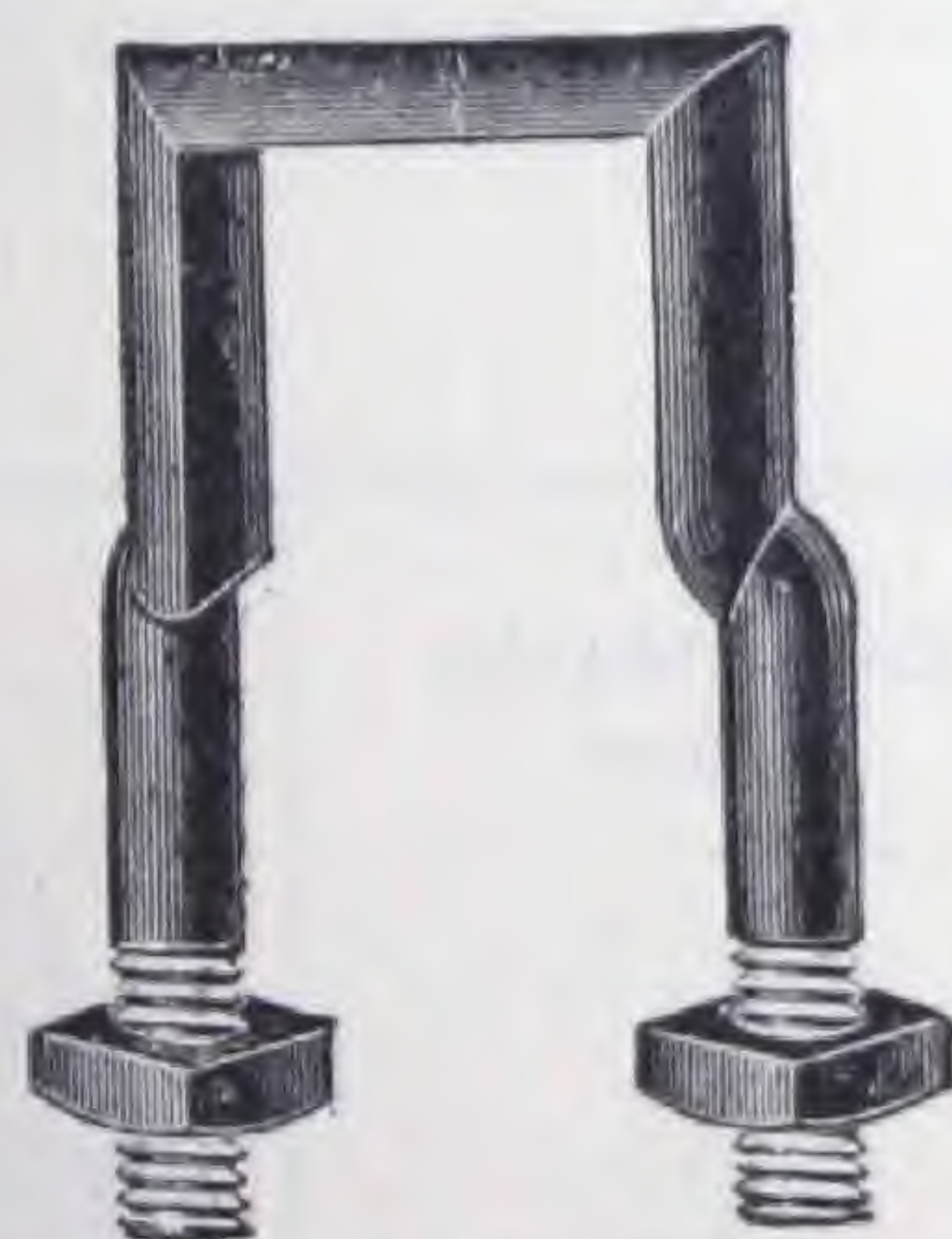


No. 1017 1/2—"Bailey" Pattern

Width of Spring (Inches)	Size of Shanks (Inches)	Length of Flat (Inches)	Price per 100
1 1/4	5/16	3/4	\$10.00
1 1/4	5/16	7/8	10.00
1 1/4	5/16	1	10.00

Special pattern to be used in connection with "Bailey" Hangers.

STAY END CLIPS



No. 1018

Used for clipping stay brace to naked axle.

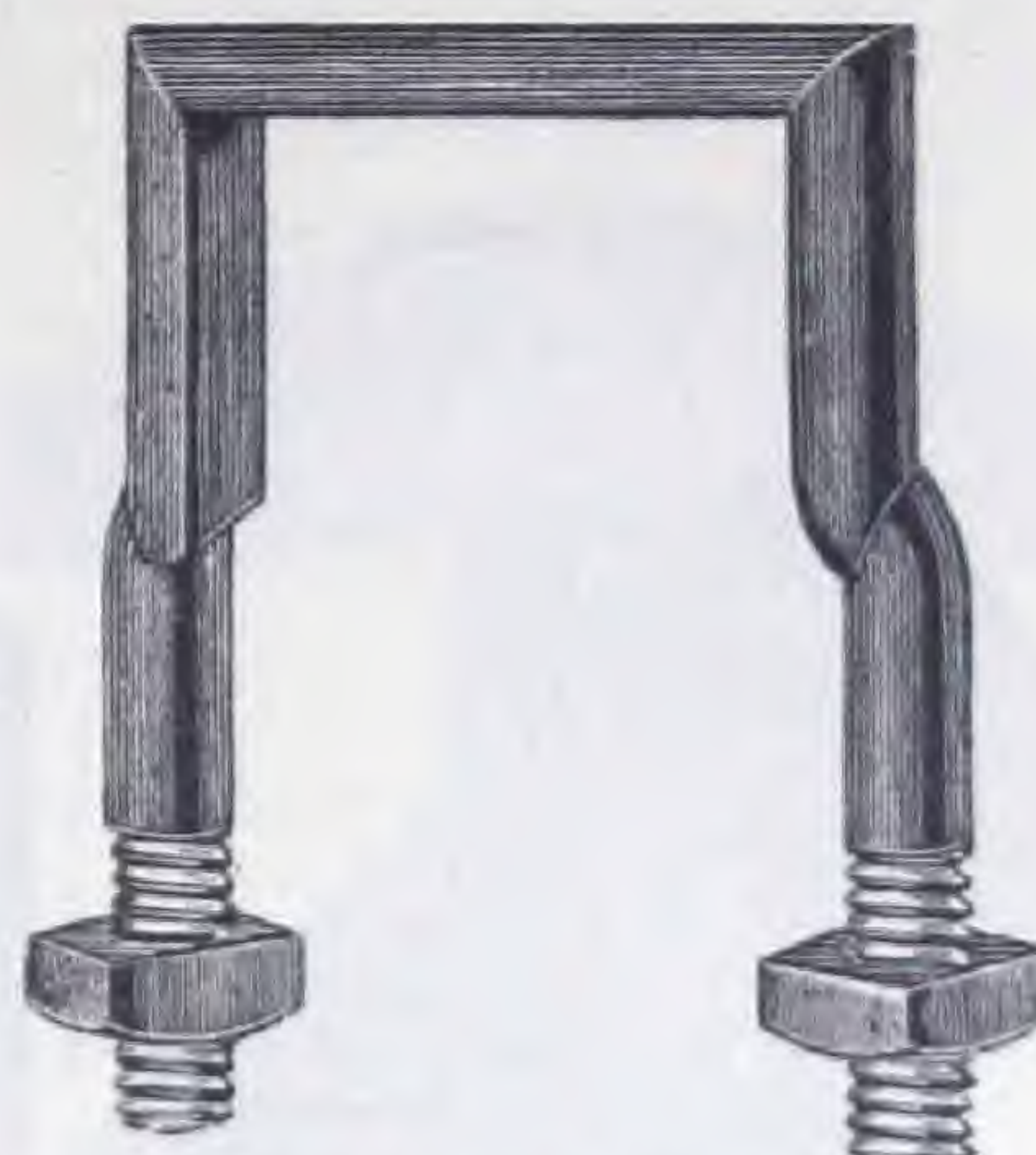
List of July 1st, 1905

Size No.	Size of Axle (Inches)	Size of Shanks (Inches)	Length of Shanks (Inches)	Price per 100
B	7/8	5/16	1 1/4	\$11.00
C	1 5/16	5/16	1 1/4	11.00
D	1	5/16	1 1/4	11.00

In ordering give article and size numbers.
Packed fifty pieces in a box.

SHORT SPRING CLIPS

Square Corner Pattern



List of July 1st, 1905

No. 1019			
Width of Spring (Inches)	Length of Flat (Inches)	Size of Shanks (Inches)	Price per 100
1	3/4	5/16	\$10.00
1 1/4	3/4	5/16	10.00
1 1/4	1	5/16	10.00
1 1/4	1 1/4	5/16	11.00
1 1/4	1 1/2	5/16	12.00
1 1/2	1	5/16	13.00
1 1/2	1 1/4	5/16	13.00
1 1/2	1 1/2	5/16	14.00

No. 1020			
Width of Spring (Inches)	Length of Flat (Inches)	Size of Shanks (Inches)	Price per 100
1	7/8	3/8	\$15.00
1 1/8	1	3/8	15.00
1 1/4	1	3/8	15.00
1 1/4	1 1/4	3/8	16.00
1 1/4	1 1/2	3/8	17.00
1 3/8	1 1/2	3/8	18.00
1 1/2	1 1/4	3/8	18.00
1 1/2	1 1/2	3/8	19.00

Sizes other than listed will be specially made if ordered in sufficient quantities. Prices on application.

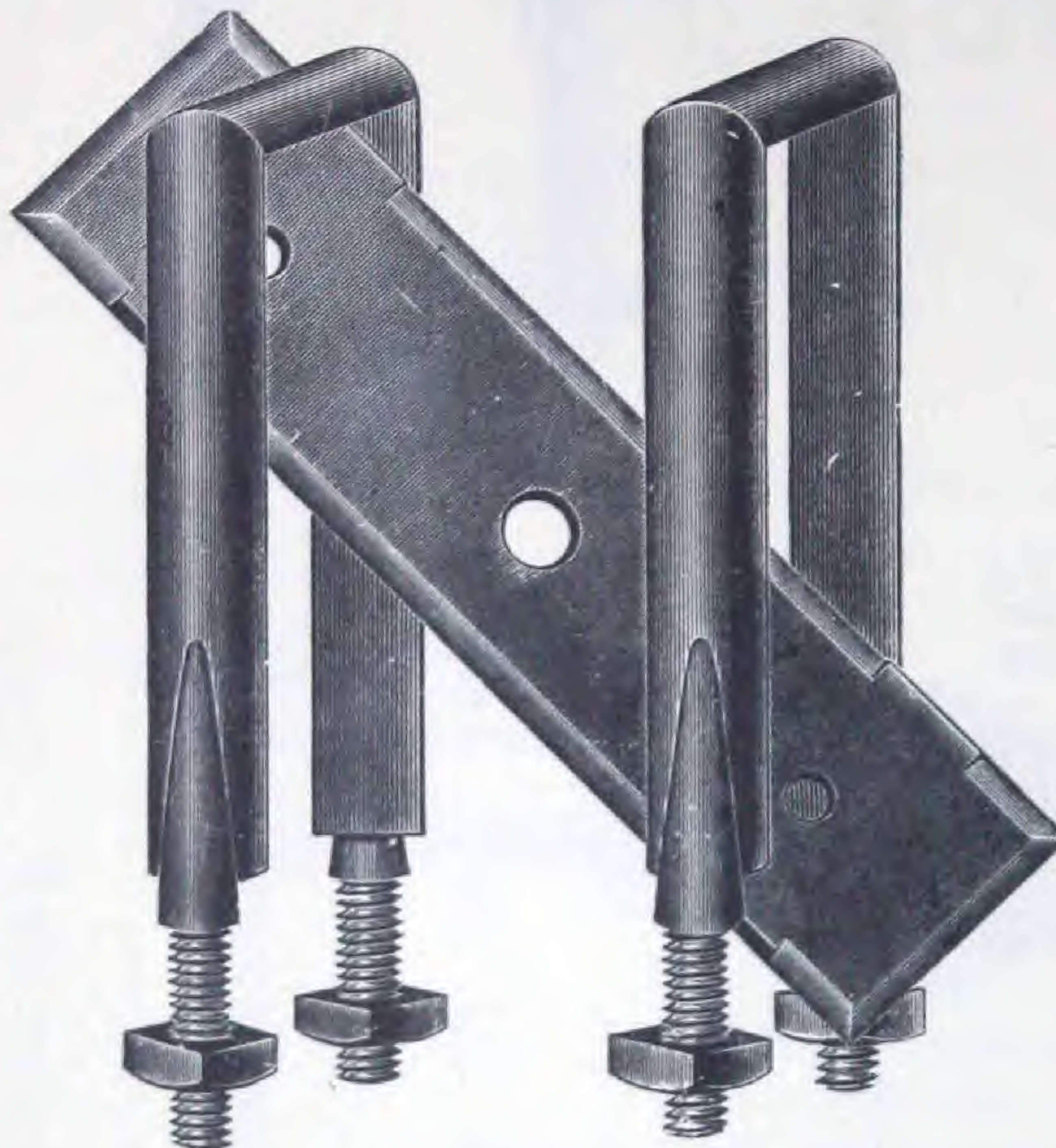
In ordering give article number, width of spring, and length of flat part.

Packed fifty pieces in a box.

CARRIAGE HARDWARE—*Cont'd*

SADDLE CLIPS

List of July 1st, 1907.



No. 1027
Three Pieces
Square Corner
Pattern
Rebates from List
Without Plates
\$3.75 per 100 sets

In ordering please specify whether plates are required 3½ or 4 inches centre to centre of outside holes, and whether scroll or square end plates are required.

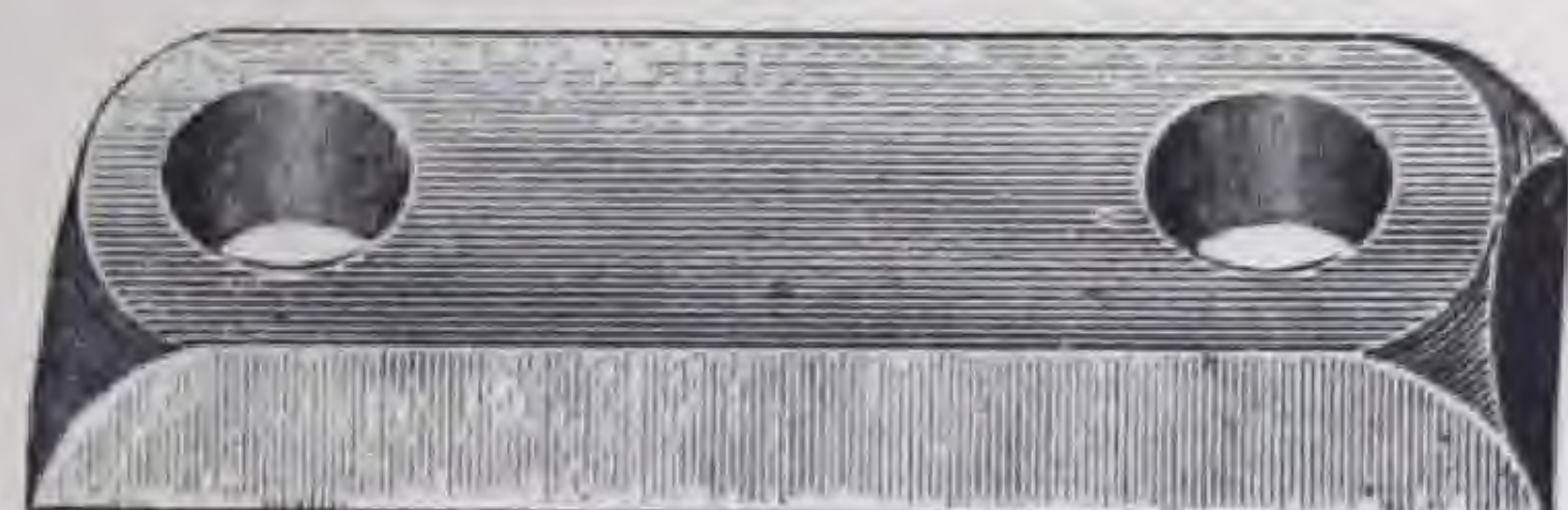
*In ordering give article and size numbers.
Ten sets in a box.*

Size No.	Width of Spring (Inches)	Length of Flat (Inches)	Size of Shanks (Inches)	Price per 100 Sets ¹
1¾	1¼	1¾	5/16	\$24.00
2	1¼	2	5/16	24.00
2¼	1¼	2¼	5/16	24.50
2¾	1¼	2¾	5/16	25.50
3	1¼	3	5/16	26.00
3¼	1¼	3¼	5/16	26.50
3½	1¼	3½	5/16	27.00
3¾	1¼	3¾	5/16	27.50
2½	1⅜	2½	5/16	26.00
3¾	1⅜	3¾	5/16	28.50
2¾	1½	2¾	5/16	27.50
3¾	1½	3¾	5/16	29.50

CARRIAGE HARDWARE—Cont'd

CLIP YOKES

No. 1038



No.	Diameter of Holes (Inch)	Size of Axle (Inches)
D	$\frac{5}{16}$	1
F	$\frac{5}{16}$	$1\frac{1}{8}$
G	$\frac{5}{16}$	$1\frac{1}{4}$
H	$\frac{5}{16}$	$1\frac{3}{8}$
J	$\frac{5}{16}$	$1\frac{1}{2}$
L	$\frac{3}{8}$	1
M	$\frac{3}{8}$	$1\frac{1}{8}$
N	$\frac{3}{8}$	$1\frac{1}{4}$
O	$\frac{3}{8}$	$1\frac{3}{8}$
P	$\frac{3}{8}$	$1\frac{1}{2}$
R	$\frac{3}{8}$	$1\frac{3}{4}$
S	$\frac{3}{8}$	2

Packed in boxes of 10 pounds.

FELLOE PLATES

No. 1043



Width of Felloe (Inches)	Price Per Pound
$\frac{3}{4}$	\$0.10
$\frac{7}{8}$	.10
1	.10
$1\frac{1}{8}$	.10
$1\frac{1}{4}$	.10
$1\frac{3}{8}$	.10
$1\frac{1}{2}$	.10
$1\frac{5}{8}$	.10
$1\frac{3}{4}$	.10
2	.10

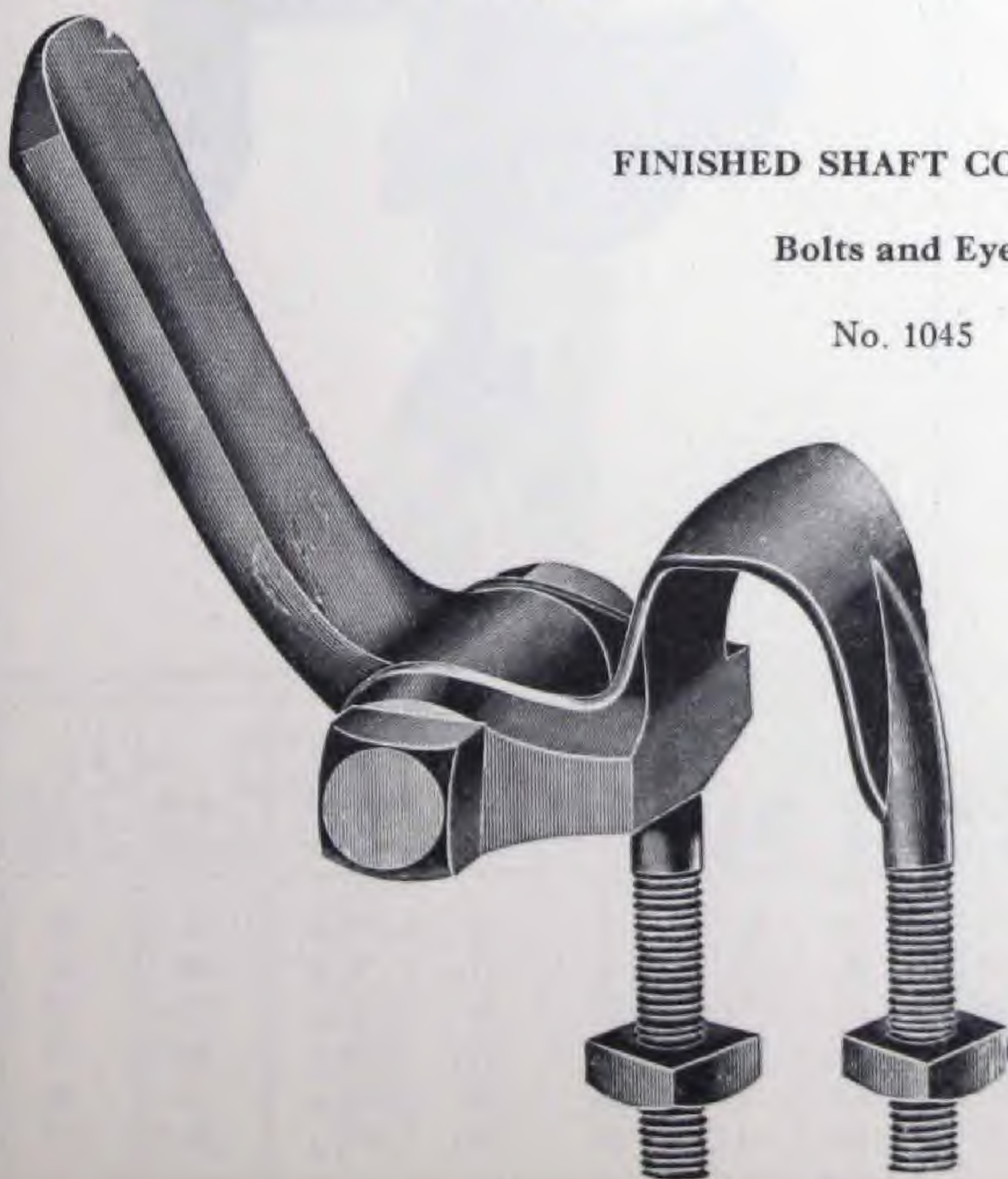
Packed in boxes of 5 pounds.

FINISHED SHAFT COUPLINGS

Bolts and Eyes

No. 1045

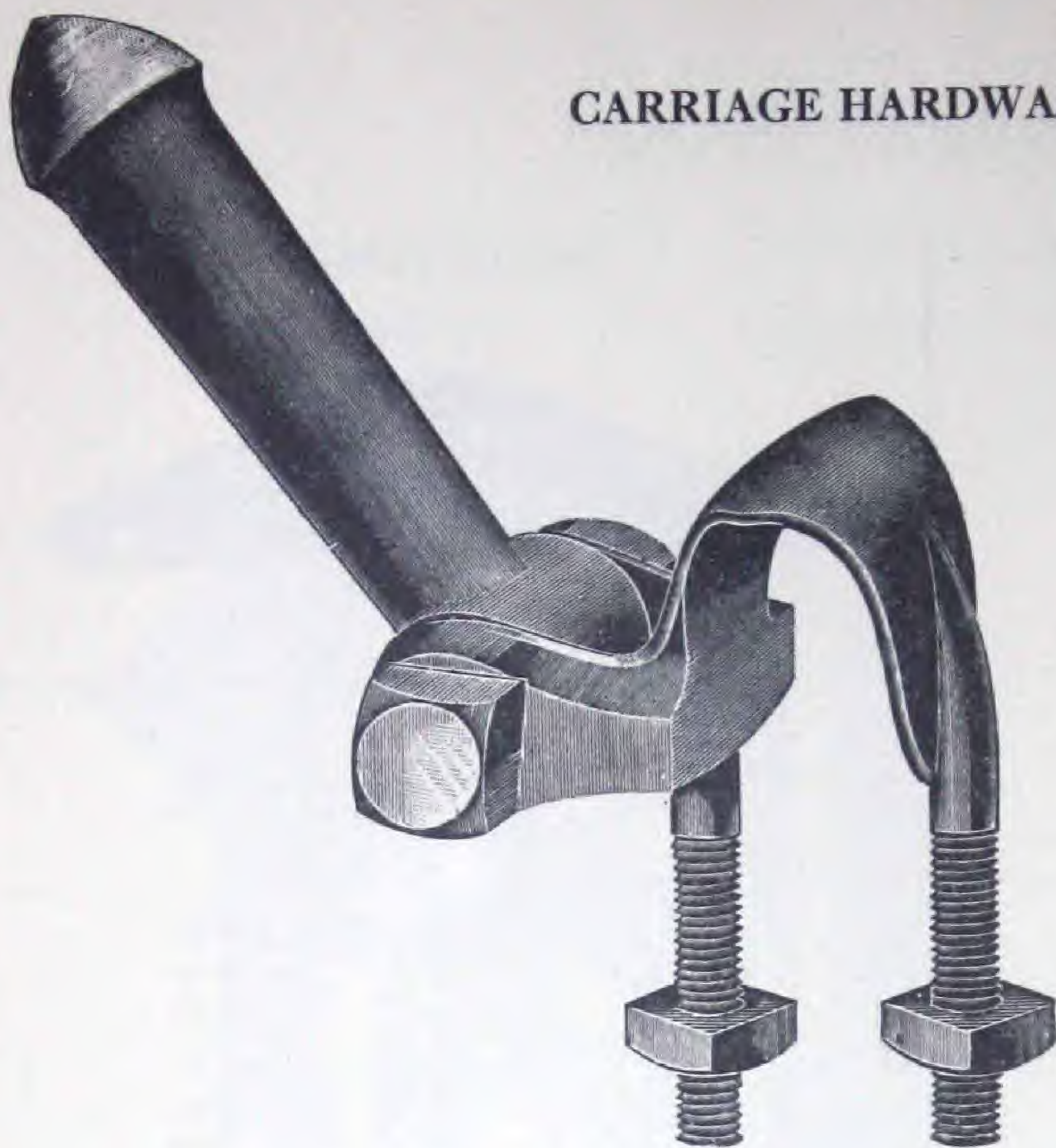
List of July 1st, 1907



Size No.	Style	Size of Eye (inches)	Dia. of Bolt	Dia. of Shanks	Length of Clip	Price per Pair
1	Boston	1 Light	$\frac{3}{8}$	$\frac{5}{16}$	3	.80
2B	New York	1 Heavy	$\frac{7}{16}$	$\frac{5}{16}$	$3\frac{1}{4}$	.87
$3\frac{1}{2}$	Baltimore	$1\frac{1}{8}$ "	$\frac{7}{16}$	$\frac{3}{8}$	4	1.25
4	Philadelphia	$1\frac{1}{4}$ "	$\frac{7}{16}$	$\frac{3}{8}$	$4\frac{1}{2}$	1.45
$5\frac{1}{2}$		$1\frac{1}{2}$ "	$\frac{1}{2}$	$\frac{7}{16}$	5	2.12
7		$1\frac{3}{4}$ "	$\frac{1}{2}$	$\frac{1}{2}$	6	4.35

In ordering give article and size numbers.
In boxes of six pairs, except Nos. $5\frac{1}{2}$ and 7, three pairs.

CARRIAGE HARDWARE—Cont'd



FINISHED POLE COUPLINGS

Bolts and Eyes

No. 1046

List of July 1st, 1905

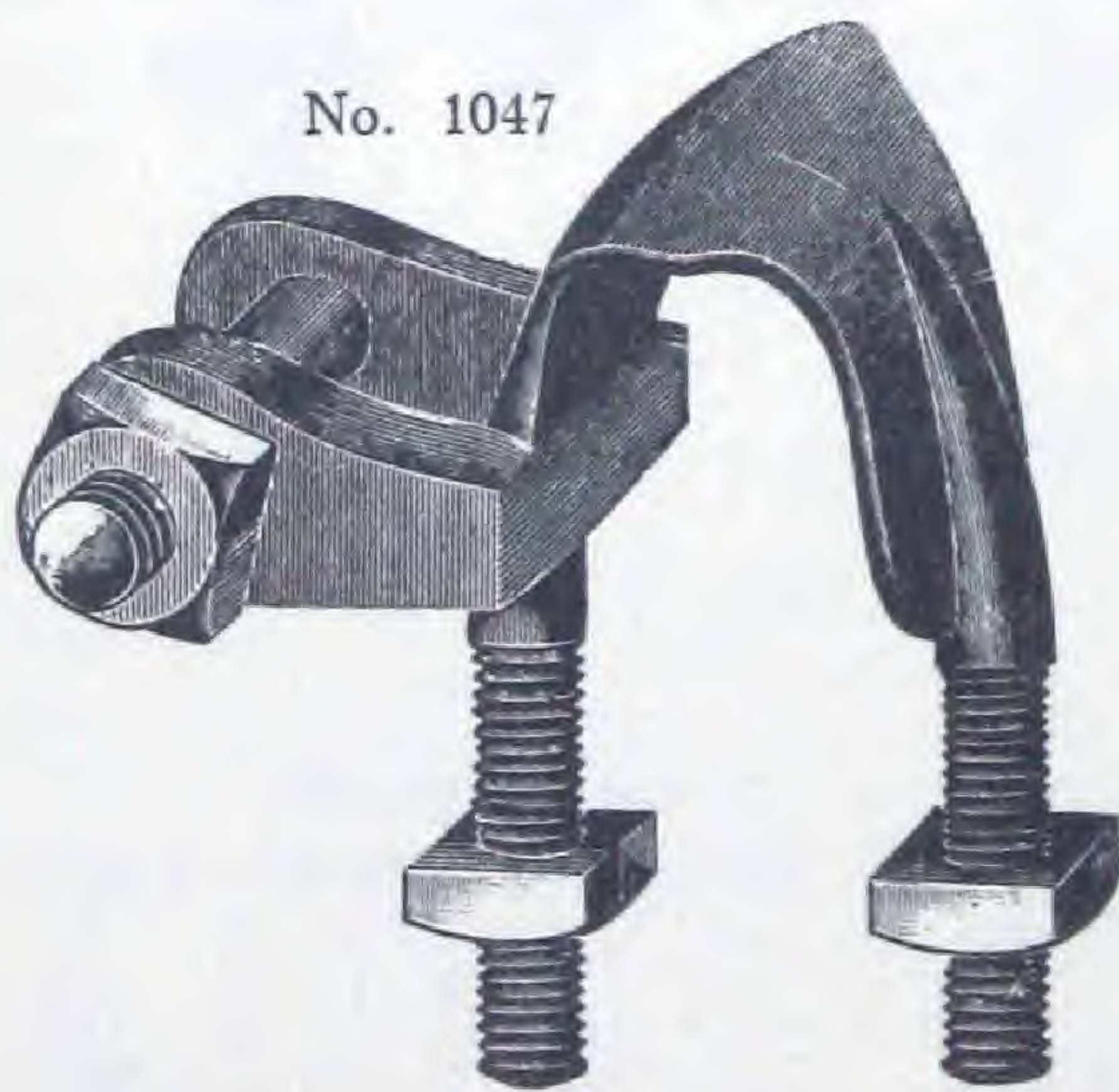
Size No.	Style	Size of Eye	Dia. of Bolt	Dia. of Shanks	Length of Clip	Price per Pair
1	Boston	1 Light	$\frac{3}{8}$	$\frac{5}{16}$	3	.80
2B	New York	1 Heavy	$\frac{7}{16}$	$\frac{5}{16}$	$3\frac{1}{4}$	.87
$3\frac{1}{2}$	Baltimore	$1\frac{1}{8}$	$\frac{7}{16}$	$\frac{3}{8}$	4	1.25
4	Philadelphia	$1\frac{1}{4}$	$\frac{7}{16}$	$\frac{3}{8}$	$4\frac{1}{2}$	1.45
$5\frac{1}{2}$		$1\frac{1}{2}$	$\frac{1}{2}$	$\frac{7}{16}$	5	2.12
7		$1\frac{3}{4}$	$\frac{1}{2}$	$\frac{1}{2}$	6	4.35

In ordering give article and size numbers.
In boxes of six pairs, except No. $5\frac{1}{2}$ and 7 three pairs.

COUPLING CLIPS

Point Centre Patterns

No. 1047



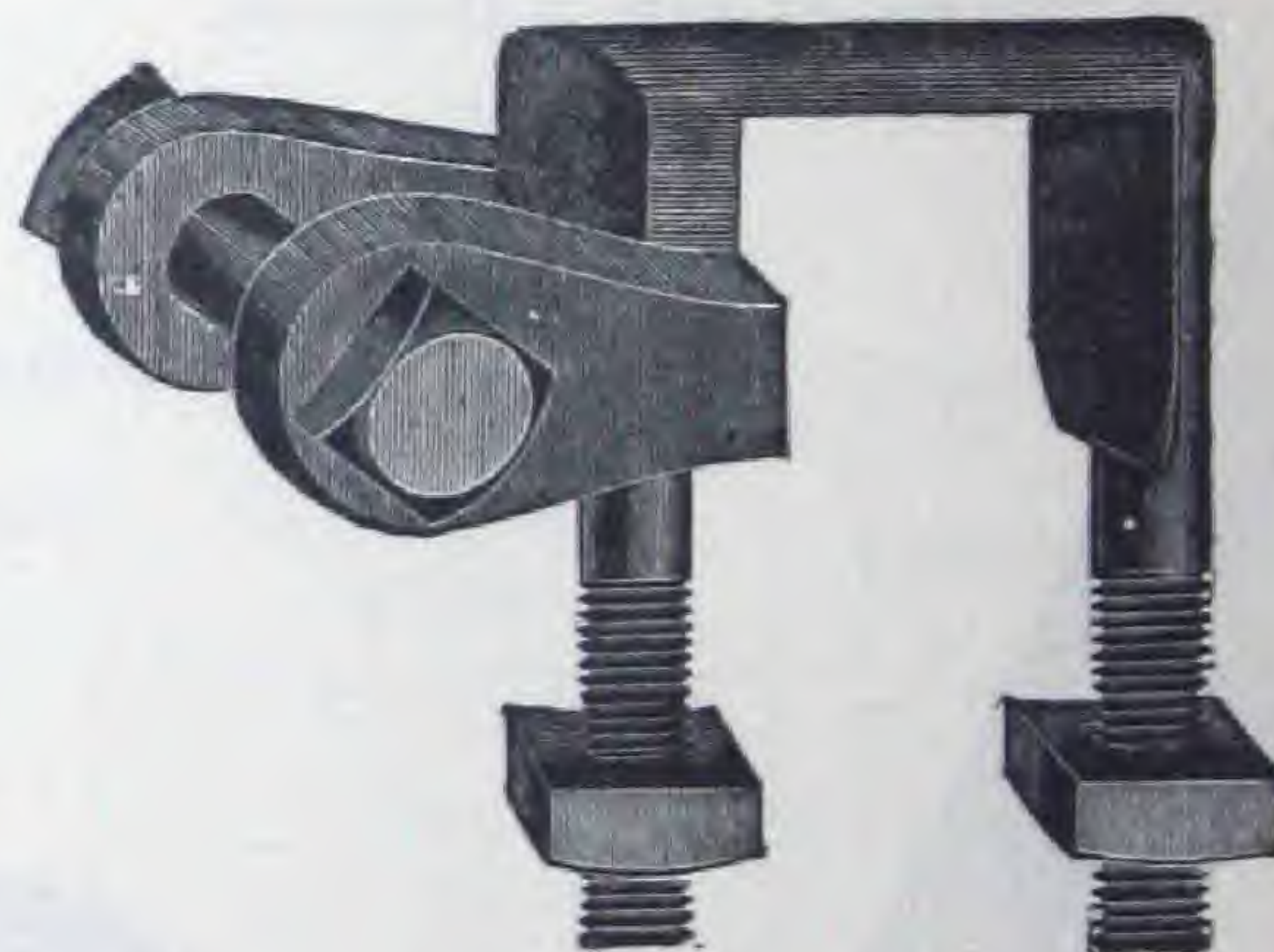
List of July 1st, 1905

Size No.	Style	Size of Eye	Dia. of Bolt	Dia. of Shanks	Length of Clip	Per Pair with Bolts	Per Pair without Bolts.
1	Boston	1 Light	$\frac{3}{8}$	$\frac{5}{16}$	3	.50	.45
2B	New York	1 Heavy	$\frac{7}{16}$	$\frac{5}{16}$	$3\frac{1}{4}$	.55	.50
$3\frac{1}{2}$	Baltimore	$1\frac{1}{8}$ Hy.	$\frac{7}{16}$	$\frac{3}{8}$	4	.87	.80
4	Philadelphia	$1\frac{1}{4}$	$\frac{7}{16}$	$\frac{3}{8}$	$4\frac{1}{2}$	1.00	.93
$5\frac{1}{2}$		$1\frac{1}{2}$ Hy.	$\frac{1}{2}$	$\frac{7}{16}$	5	1.47	1.35
7		$1\frac{3}{4}$	$\frac{1}{2}$	$\frac{1}{2}$	6	3.00	3.85

COUPLING CLIPS

Square Axle Pattern for Naked Axle Vehicles.

No. 1048



List of July 1st, 1905

Size No.	Size Axle (Inches)	Size of Eye (Inches)	Dia. of Bolt	Dia. of Shanks	Per Pair with Bolts	Per Pair without Bolts
A	$\frac{7}{8}$	1	$\frac{3}{8}$	$\frac{5}{16}$	.75	.70
B	$\frac{7}{8}$	1	$\frac{7}{16}$	$\frac{5}{16}$	.80	.75
C	$1\frac{5}{16}$	1	$\frac{3}{8}$	$\frac{5}{16}$	.75	.70
D	$1\frac{5}{16}$	1	$\frac{7}{16}$	$\frac{5}{16}$	.80	.75
E	1	1	$\frac{3}{8}$	$\frac{5}{16}$	.75	.70
F	1	1	$\frac{7}{16}$	$\frac{5}{16}$	.80	.75



CARRIAGE HARDWARE—Cont'd

SLEIGH COUPLINGS

Albany Pattern

No. 1049



Revised List, Adopted July 1st, 1907.

Size No.	Diameter of Eye in Inches	Diameter of Bolt in Inches	Price per Pair with Bolts	Price per Pair without Bolts
B	1	$\frac{3}{8}$	.55	.50
C	1	$\frac{7}{16}$	.55	.50

$\frac{5}{16}$ inch diameter drilled hole for bar.

SHAFT EYES

No. 1052



List of July 1st, 1903

Size No.	Width of Eye	Diameter of Bolt	Price per Pair
C	1 light	$\frac{3}{8}$	.30
E	1 Heavy	$\frac{3}{8}$	.30
F	1 "	$\frac{7}{16}$	.32
G	$1\frac{1}{8}$	$\frac{7}{16}$	.38
H	$1\frac{1}{4}$	$\frac{7}{16}$	.45
K	$1\frac{3}{4}$	$\frac{1}{2}$	.65
M	$1\frac{3}{4}$	$\frac{1}{2}$	1.35

POLE EYES

No. 1053



List of July 1st, 1903

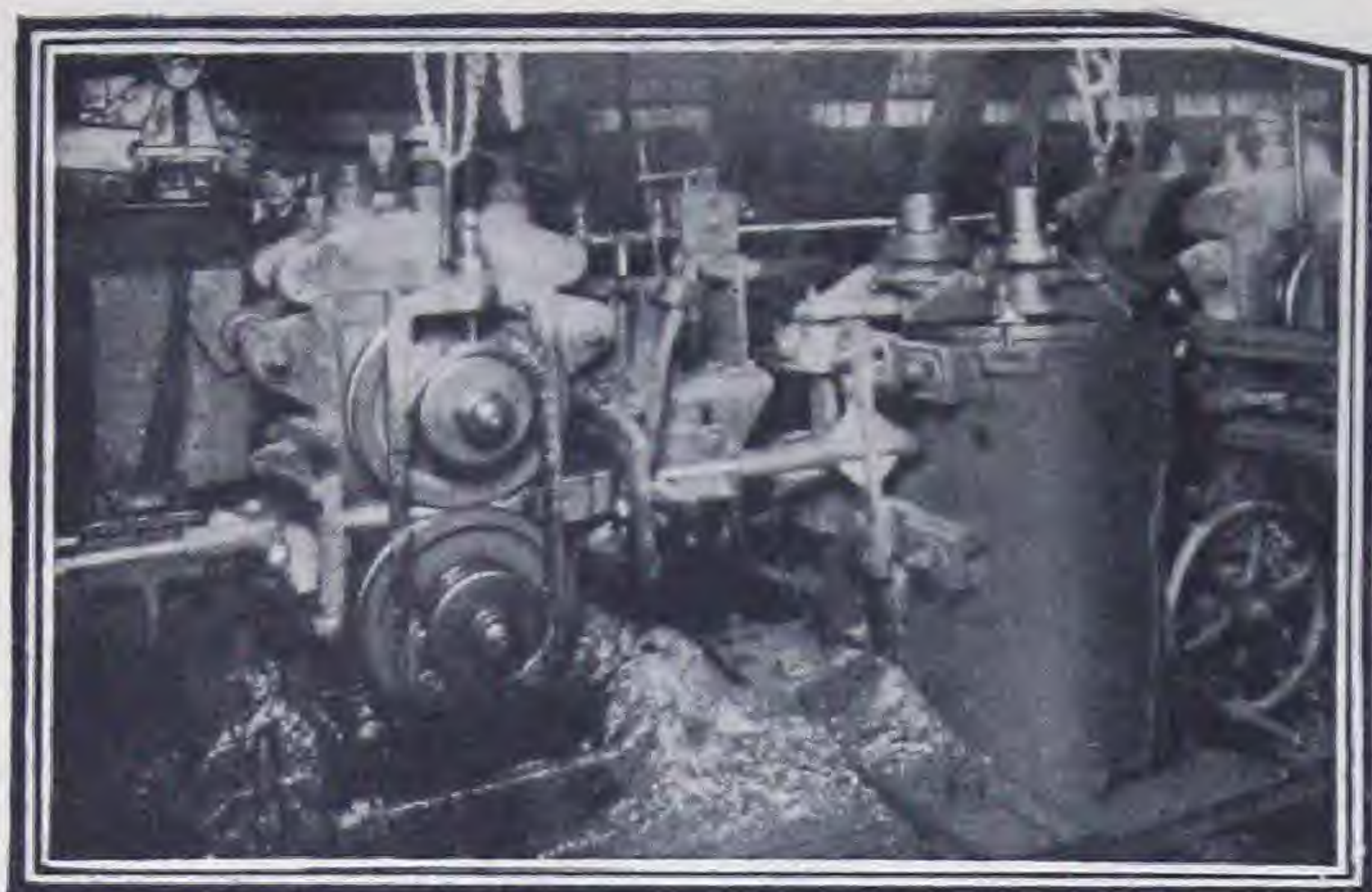
Size No.	Width of Eye	Diameter of Bolt	Price per Pair
C	1 Light	$\frac{3}{8}$	.30
F	1 "	$\frac{7}{16}$.32
G	$1\frac{1}{8}$	$\frac{7}{16}$.38
H	$1\frac{1}{4}$	$\frac{7}{16}$.45
J	$1\frac{3}{4}$	$\frac{7}{16}$.65
M	$1\frac{3}{4}$	$\frac{1}{2}$	1.35

Twelve pairs in a box.

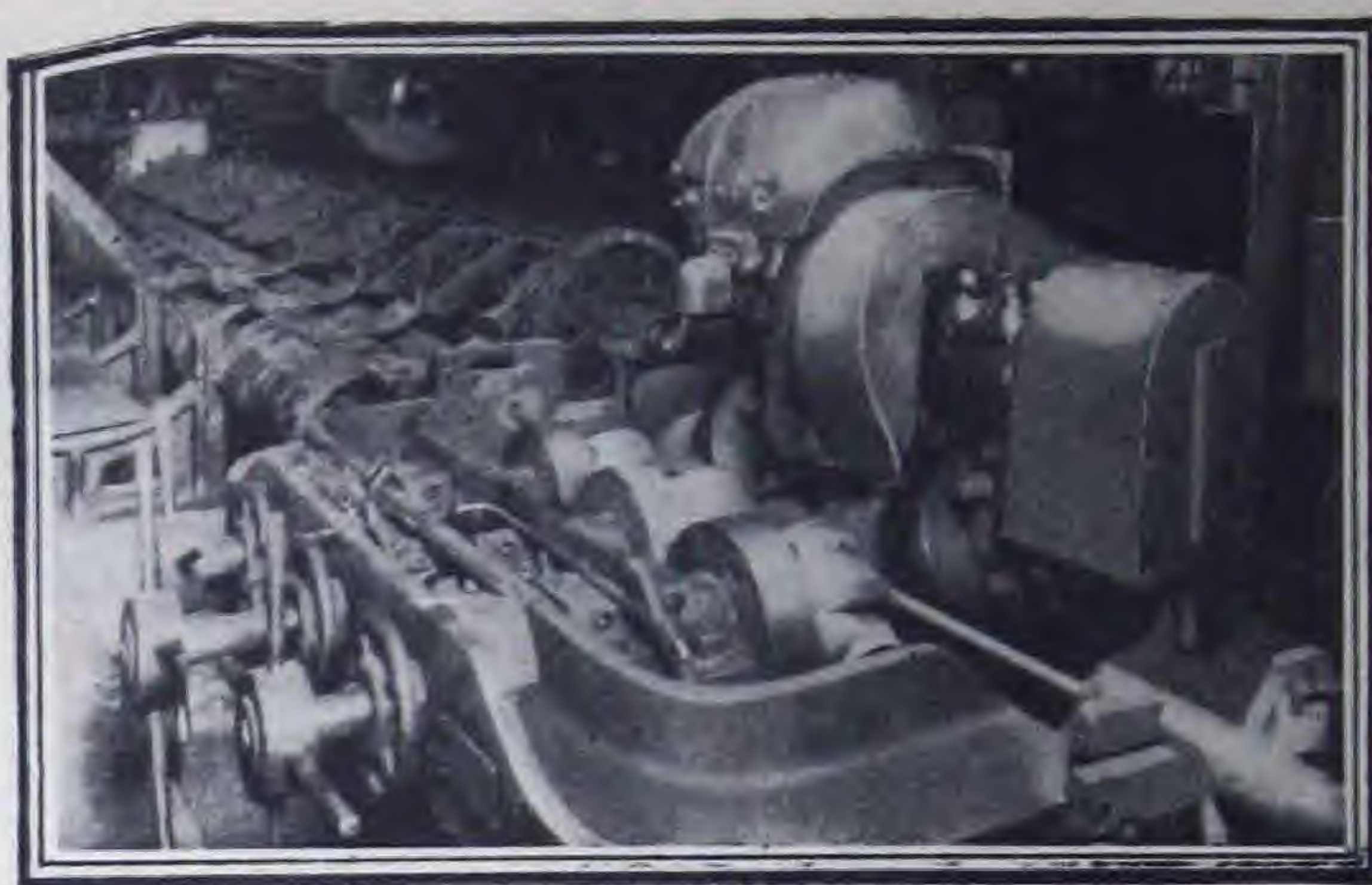
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STEEL PIPE



Scale Freeing



Cold Straightening



BUTT WELD PIPE

SCALE FREE—COLD STRAIGHTENED

fitted with

IMPROVED COUPLINGS

As "Pioneer Makers of Pipe in Canada" our experience goes back for a period of over sixty years. Our pipe mill, known as our St. Henry Works, is located in Montreal and is thoroughly modern in every respect. It is equipped to manufacture butt weld pipe by the scale-free process, and also has special equipment for the cold straightening of pipe and the manufacture of couplings and nipples.

The scale-free process is a separate and distinct operation in addition to the usual process of making pipe. The equipment consists of a series of rolls through which the pipe must pass while still at a working heat. The action of the rolls breaks down and removes all mill scale from both inside and outside of the pipe. Thus one of the principal causes of corrosion is removed and many years of life are added to plumbing, heating, refrigeration and sprinkler installations.

Cold straightening is the best method of finishing tubes. In addition to producing perfectly straight lengths, it gives positive assurance that the pipe will be a true round, and also ensures sufficient stock over the full circumference of the pipe to permit cutting threads of equal depth throughout. Thus cold straightening contributes definitely to the making of a rigid and absolutely tight joint between pipe and coupling.

Stelco pipe is being specified continually for major constructions throughout Canada and is held in very high regard by leading architects, contractors and plumbers.

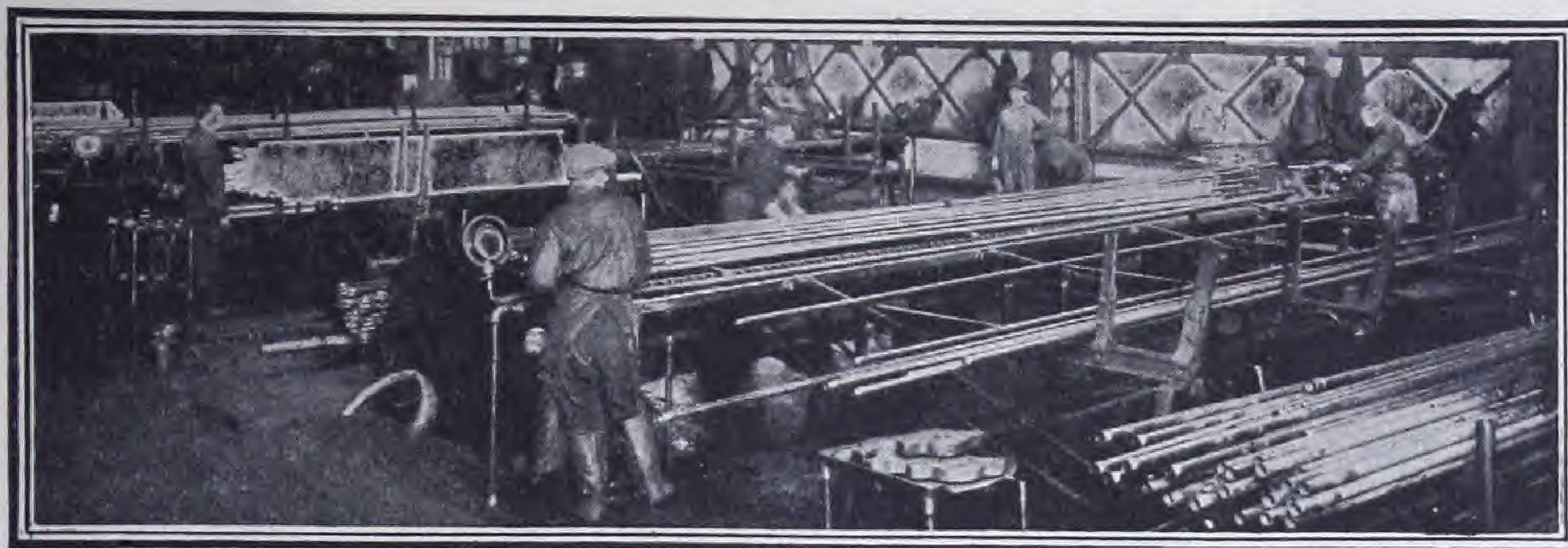


This tag identifies Stelco Pipe.

We will be pleased to forward a booklet entitled "By the Pioneer Makers of Pipe in Canada" which deals specially with the qualities of this product.



SCALE FREE STEEL PIPE—Cont'd



Testing Machines. Every individual length tested to 700 lbs. Hydraustatic Pressure

GENERAL NOTES

On the following pages we list:—

STANDARD STEEL PIPE (Butt Welded) in sizes $\frac{1}{8}$ up to and including 4 inches.

STANDARD STEEL PIPE (Lap Welded) in sizes 5 up to and including 12 inches.

EXTRA HEAVY STEEL PIPE, in sizes $\frac{3}{8}$ up to and including 3 inches.

STANDARD GENUINE WROUGHT IRON PIPE (Butt Weld) $\frac{1}{4}$ up to and including 3 inches.

STANDARD GENUINE WROUGHT IRON PIPE (Lap Welded) $3\frac{1}{2}$ and 4 inches.

STANDARD COPPER BEARING STEEL PIPE (Butt Weld) $\frac{1}{4}$ up to and including 4 inches.

EXTRA HEAVY COPPER BEARING STEEL PIPE (Butt Weld) $\frac{3}{8}$ up to and including 3 inches.

Extra Heavy Pipe is Heavier than Standard; the outside diameter is the same as Standard Pipe, the extra thickness being on the inside, so both Extra Heavy and Standard Pipes use the same pipe fittings.

Every piece of pipe is carefully tested, but as it is impossible to always detect imperfections, the only guarantee that is given is to replace such goods as prove defective. Under no circumstances are we responsible for any damages beyond the price of the goods. No charges for labor or expenses required to repair defective goods or occasioned by them will be allowed. If the goods are defective the measure of damages is the price of the defective material.

All black pipe is coated with a protective, transparent varnish which keeps it looking new and fresh in transit and in stock.

TESTS. All Stelco pipe is submitted to the following severe tests with the object of discovering imperfections.

STANDARD BUTT WELDED PIPE is tested to withstand a pressure of 700 pounds per square inch.

EXTRA HEAVY BUTT WELDED PIPE is tested to withstand a pressure of 700 pounds per square inch.

After Stelco pipe is galvanized, each length is subjected to air pressure, preventing it from becoming blocked with spelter and leaving the inside surface of pipe clean and smooth.

TRADE CUSTOMS. Standard Pipe is shipped in random lengths screwed and coupled, unless otherwise specified.

Extra Heavy Pipe is always shipped plain ends without coupling, unless otherwise ordered. Coupled and Threaded Pipe subject to extra charge.

Random lengths of Standard and Extra Heavy Pipe are considered to be 12 to 20 feet.

An extra charge is made for pipe cut to specified lengths.

Standard Pipe ordered cut to specified lengths is always furnished with ends threaded, but without couplings. Extra Heavy Pipe cut to lengths is furnished plain ends.

Pipe ordered cut to specified lengths with couplings is always measured to include the coupling, i.e. over all, unless otherwise ordered.

Pipe made to specification where the buyer is to inspect, must be inspected and accepted before shipment is made. After shipment is made our responsibility ceases.

The permissible variation in weight is 5% above or below listed weights.

SCALE FREE STEEL PIPE—Cont'd



Interior View of Pipe
put through the Scale
Free Process.

The superiority of Scale Free Pipe is evident for these reasons:—
Improved and strengthened texture of the steel.
Tested and proven welds.
Greater delivery capacity.
Less friction loss.
Minimized corrosive conditions.
No loose scale to damage valves and clog small openings.
Cleaner and more accurate threads.
Cutting and threading labour reduced.
A material saving in tools and dies.
Better galvanized coatings.
Danger of peeling when bending or working galvanized pipe eliminated.



Interior View of Pipe
made by the ordinary
Butt Weld Process.

LIST PRICES



STANDARD BLACK PIPE

Size	Standard Butt Weld Pipe		Size	Standard Lap Weld Pipe	
	Price per Foot	Nominal Weight per Foot Screwed and Coupled		Price per Foot	Nominal Weight per Foot Screwed and Coupled
$\frac{1}{8}$	On application	.245	5	\$1.48	14.810
$\frac{1}{4}$	.06	.425	6	1.92	19.185
$\frac{3}{8}$	.06	.565	8	2.88	28.809
$\frac{1}{2}$	.08 $\frac{1}{2}$	.852	10	4.12	41.132
$\frac{3}{4}$	.11 $\frac{1}{2}$	1.134	12	5.07	50.706
1	.17	1.684			
1 $\frac{1}{4}$	.23	2.281			
1 $\frac{1}{2}$	.27 $\frac{1}{2}$	2.731			
2	.37	3.678			
2 $\frac{1}{2}$	.58 $\frac{1}{2}$	5.819			
3	.76 $\frac{1}{2}$	7.616			
3 $\frac{1}{2}$	.92	9.202			
4	1.09	10.889			



EXTRA HEAVY BUTT WELD PIPE

Size	Price per Foot	Nominal Wgt. per Ft.	Size	Price per Foot	Nominal Wgt. per Ft.
$\frac{3}{8}$	\$0.07 $\frac{1}{2}$	.738	1 $\frac{1}{2}$	\$.36 $\frac{1}{2}$	3.631
$\frac{1}{2}$	.11	1.087	2	.50 $\frac{1}{2}$	5.022
$\frac{3}{4}$	.15	1.473	2 $\frac{1}{2}$	.77	7.661
1	.22	2.171	3	1.03	10.252
1 $\frac{1}{4}$	.30	2.996			

For GALVANIZED or ASPHALTED PIPE an extra charge will be made above black. For Pipe smoothed on the inside, known as reamed and drifted, an extra charge will be made above Standard Pipe.



SCALE FREE STEEL PIPE—Cont'd

Table of Dimensions for Standard Steel Pipe

Diameter			Thick- ness Nomi- nal Inches	Circumfer- ence		Transverse Areas			Length of Pipe per Square Foot of:		Length of Pipe con- taining one cubic foot	Nom- inal Weight per Ft. Screwed and Coupled	Num- ber of Threads per Inch
Nom- inal Inter- nal Ins.	Actual Exter- nal Ins.	Ap- prox- imate Inter- nal Ins.		Exter- nal Inches	Inter- nal Inches	Exter- nal Square Inches	Inter- nal Square Inches	Metal, Square Inches	Exter- nal Surface Feet	Inter- nal Surface Feet			
1/8	.405	.270	.068	1.272	.845	.129	.0568	.0720	9.440	14.15	2,513.00	.245	27
1/4	.540	.364	.088	1.696	1.144	.229	.1041	.1249	7.075	10.49	1,383.30	.425	18
3/8	.675	.494	.091	2.121	1.549	.358	.1909	.1669	5.657	7.76	751.20	.568	18
1/2	.840	.623	.109	2.629	1.954	.554	.3039	.2503	4.547	6.15	472.40	.852	14
3/4	1.050	.824	.113	3.299	2.589	.866	.5333	.3327	3.637	4.635	270.00	1.134	14
1	1.315	1.048	.134	4.131	3.289	1.358	.8609	.4972	2.904	3.645	166.90	1.684	11 1/2
1 1/4	1.660	1.380	.140	5.215	4.335	2.164	1.496	.6685	2.301	2.768	96.25	2.281	11 1/2
1 1/2	1.900	1.611	.145	5.969	5.058	2.835	2.038	.7995	2.010	2.371	70.66	2.731	11 1/2
2	2.375	2.067	.154	7.461	6.494	4.430	3.356	1.074	1.608	1.848	42.91	3.678	11 1/2
2 1/2	2.875	2.468	.204	9.032	7.750	6.492	4.780	1.712	1.328	1.547	30.10	5.819	8
3	3.500	3.067	.217	10.996	9.632	9.621	7.388	2.238	1.091	1.245	19.50	7.616	8
3 1/2	4.0	3.548	.226	12.566	11.146	12.566	9.887	2.680	.955	1.077	14.57	9.202	8
4	4.5	4.026	.237	14.137	12.648	15.904	12.730	3.175	.849	.949	11.31	10.889	8
5	5.563	5.045	.259	17.477	15.849	24.306	19.985	4.321	.687	.757	7.2	14.810	8
6	6.625	6.065	.280	20.813	19.054	34.472	28.886	5.586	.577	.630	4.98	19.185	8
8	8.625	7.982	.322	27.096	25.073	58.426	50.021	8.405	.443	.478	2.88	28.809	8
10	10.75	10.019	.366	33.772	31.472	90.763	78.822	11.940	.355	.381	1.82	41.132	8
12	12.75	12.0	.375	40.055	37.70	127.677	113.098	14.590	.299	.319	1.27	50.706	8

Table of Dimensions for Extra Heavy Steel Pipe

Diameter			Thick- ness Nominal, Inches	Circumference		Transverse Areas			Length of Pipe per Square Foot of		Nominal Weight per Ft. Plain Ends
Nominal Internal Inches	Actual External Inches	Approximate Internal Inches		External Inches	Internal Inches	External Square Inches	Internal Square Inches	Metal, Square Inches	External Surface, Feet	Internal Surface, Feet	
1/2	.840	.542	.149	2.639	1.703	.554	.231	.323	4.547	7.046	1.087
3/4	1.050	.736	.157	3.299	2.312	.866	.425	.441	3.637	5.109	1.473
1	1.315	.951	.182	4.131	2.988	1.358	.710	.648	2.904	4.016	2.171
1 1/4	1.660	1.272	.194	5.215	3.996	2.164	1.271	.893	2.301	3.003	2.996
1 1/2	1.90	1.494	.203	5.969	4.694	2.835	1.753	1.082	2.010	2.556	3.631
2	2.375	1.933	.221	7.461	6.073	4.430	2.935	1.495	1.608	1.975	5.022
2 1/2	2.875	2.315	.280	9.032	7.273	6.492	4.209	2.283	1.328	1.649	7.661
3	3.50	2.892	.304	10.996	9.086	9.621	6.569	3.052	1.091	1.328	10.252

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SCALE FREE STEEL PIPE—Cont'd

Extras per 100 feet for cutting pipe to length

Size Inches	Lengths 6 ft. and under 16 ft.		Lengths 2 ft. and under 6 ft.		Lengths 1 ft. and under 2 ft.	
	Black	Galvanized	Black	Galvanized	Black	Galvanized
$\frac{1}{8}$	\$0.60	\$0.90	\$0.80	\$1.20	\$1.00	\$1.50
$\frac{1}{4}$	.60	.90	.80	1.20	1.00	1.50
$\frac{3}{8}$	.60	.90	.80	1.20	1.00	1.50
$\frac{1}{2}$	.80	1.00	1.10	1.30	1.30	1.70
$\frac{3}{4}$	1.20	1.30	1.50	1.70	1.90	2.10
1	1.40	1.90	2.00	2.50	2.40	3.20
$1\frac{1}{4}$	2.00	2.60	2.60	3.40	3.30	4.30
$1\frac{1}{2}$	2.40	3.10	3.20	4.10	3.90	5.10
2	3.20	4.10	4.20	5.50	5.30	6.90
$2\frac{1}{2}$	5.10	6.60	6.80	8.80	8.50	11.00
3	6.70	8.60	8.90	11.50	11.10	14.40
$3\frac{1}{2}$	8.30	10.60	11.00	14.20	13.80	17.70
4	9.80	12.60	13.10	16.80	16.30	21.00
$4\frac{1}{2}$	11.50	15.00	15.50	20.00	19.50	25.00
5	13.50	17.50	18.00	23.50	22.50	29.50
6	17.50	23.00	23.50	30.50	29.00	38.00
7	23.00	29.50	31.00	39.50	38.50	49.50
8	28.00	36.00	37.00	48.00	47.00	60.00
9	33.00	43.00	45.00	58.00	56.00	72.00
10	39.00	51.00	54.00	69.00	67.00	86.00

Cut Lengths will be furnished threaded ends, no couplings, unless otherwise specified.

Pipe ordered cut to special lengths, with couplings, is measured to include the coupling, i.e., over all, unless otherwise designated.

Pipe under one foot sold from the Nipple List.

BUNDLES AND MARKING OF PIPE

Stelco Pipe $1\frac{1}{2}$ inch and under is shipped in bundles; larger sizes are shipped as single lengths. For identification Stelco Pipe is marked with a small dotted circle impressed in the pipe every four feet. For further protection, a tag, lithographed in colours, is attached to each bundle sizes $1\frac{1}{2}$ inches and smaller, and to every separate length, sizes larger than $1\frac{1}{2}$ inches. The length of pipe in feet and inches is also embossed on the tag.

In cases where a customer orders by measurement we ship whole bundles containing, as closely as possible, the number of feet required.

Size Inches	No. of Lengths in Bundle	Approx. Feet in Bundle	Approx. Weight of Bundle in Lbs	Size Inches	No. of Lengths in Bundle	Approx. Feet in Bundle	Approx. Weight of Bundle in Lbs
$\frac{1}{8}$	40	560	135	1	5	100	169
$\frac{1}{4}$	20	400	168	$1\frac{1}{4}$	3	60	137
$\frac{3}{8}$	15	300	178	$1\frac{1}{2}$	3	60	164
$\frac{1}{2}$	10	200	170				
$\frac{3}{4}$	7	140	159				

BEVELED PIPE for Welded Joints



Standard or Extra Heavy Pipe can be supplied with both ends beveled for welding the lengths together.

SPECIAL PIPE

Line Pipe is supplied for gas and oil lines in either standard or extra heavy weights fitted with special line couplings.

Pipe for artificial ice rinks and refrigeration purposes can be supplied in standard or extra heavy weights—fitted with standard or extra couplings or with beveled ends for welding.



SCALE FREE PIPE—Cont'd

BLACK COPPER BEARING STEEL PIPE

The smaller sizes are identified by the well-known Stelco label, which also bears the words "Copper Bearing." Larger sizes have the words "Copper Bearing" stencilled on each length.

We are in a position to supply Scale Free Copper Bearing Butt Weld Pipe in all standard weight sizes $\frac{1}{4}$ " diameter up to and including 4" diameter; extra heavy sizes from $\frac{3}{8}$ " diameter up to and including 3" diameter. Standard weight sizes are carried in stock $\frac{1}{4}$ " diameter up to and including 2" diameter; extra heavy sizes $\frac{1}{2}$ " diameter up to and including 2" diameter.

Size, Inches Diameter	Standard Butt Weld Pipe		Size, Inches Diameter	Extra Heavy Butt Weld Pipe	
	List Price per Foot	Nominal Weight per Ft. Screwed and Coupled		List Price per Foot	Nominal Weight per Ft. Plain Ends
$\frac{1}{4}$	\$.06	.425	$\frac{3}{8}$	\$.07 $\frac{1}{2}$	.738
$\frac{3}{8}$	.06	.568	$\frac{1}{2}$	.11	1.087
$\frac{1}{2}$	.08 $\frac{1}{2}$	.852	$\frac{3}{4}$	.15	1.473
$\frac{3}{4}$	.11 $\frac{1}{2}$	1.134	1	.22	2.171
1	.17	1.684	1 $\frac{1}{4}$	.30	2.996
1 $\frac{1}{4}$	.23	2.281	1 $\frac{1}{2}$	.36 $\frac{1}{2}$	3.631
1 $\frac{1}{2}$	.27 $\frac{1}{2}$	2.731	2	.50 $\frac{1}{2}$	5.022
2	.37	3.678	Other sizes, details on application.		
2 $\frac{1}{2}$	.58 $\frac{1}{2}$	5.819			
3	.76 $\frac{1}{2}$	7.616			
3 $\frac{1}{2}$	.92	9.202			
4	1.09	10.889			



Each length bears this marking

GENUINE WROUGHT IRON BLACK PIPE

Genuine Wrought Iron Pipe can be supplied in Standard Butt Weld sizes $\frac{1}{4}$ " up to and including 3" diameter; Standard Lap Weld sizes $3\frac{1}{2}$ " and 4" diameter.

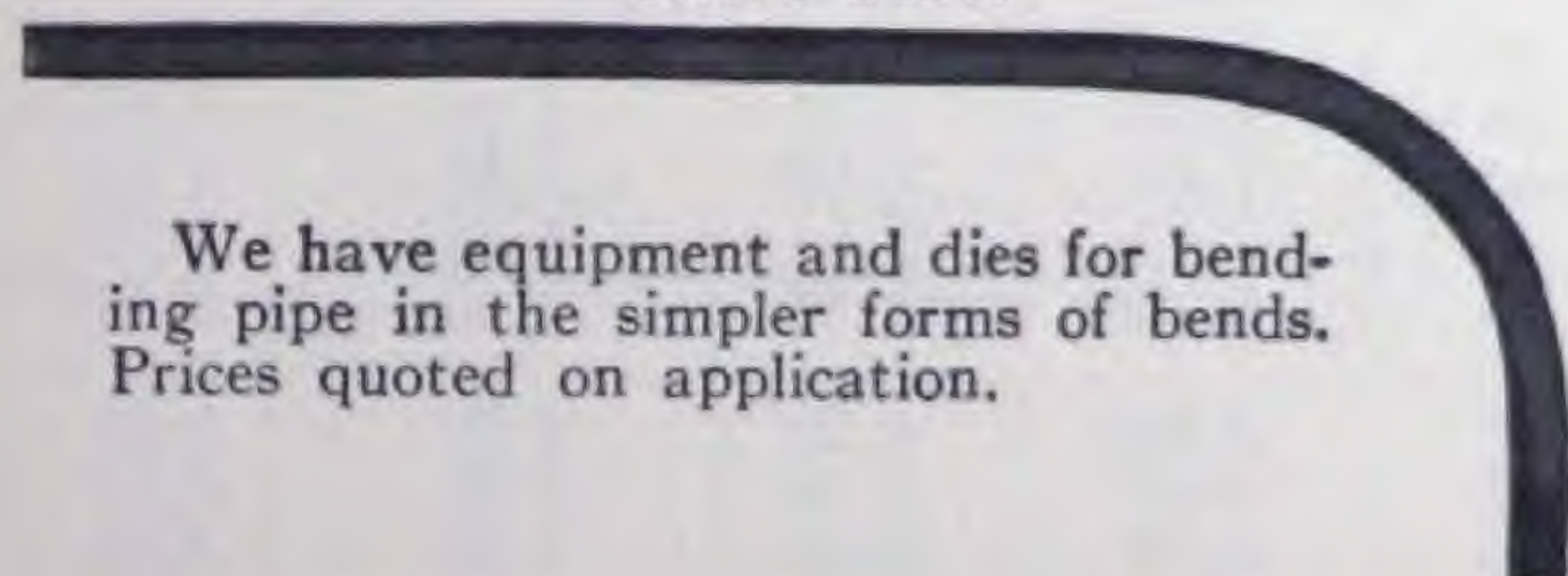
Size, Inches Diameter	Standard Butt Weld Pipe		Size, Inches Diameter	Standard Lap Weld Pipe	
	List Price per Foot	Nominal Weight per Ft. Screwed and Coupled		List Price per Foot	Nominal Weight per Ft. Screwed and Coupled
$\frac{1}{4}$	\$.06	.425	$3\frac{1}{2}$	\$.92	9.202
$\frac{3}{8}$	.06	.568	4	1.09	10.889
$\frac{1}{2}$	.08 $\frac{1}{2}$	.852			
$\frac{3}{4}$	.11 $\frac{1}{2}$	1.134			
1	.17	1.684			
1 $\frac{1}{4}$	.23	2.281			
1 $\frac{1}{2}$	.27 $\frac{1}{2}$	2.731			
2	.37	3.678			
2 $\frac{1}{2}$	.58 $\frac{1}{2}$	5.819			
3	.76 $\frac{1}{2}$	7.616			

PIPE GROOVED FOR VICTAULIC COUPLINGS



All pipe sizes manufactured and carried in stock can be supplied with grooved ends suitable for Victaulic couplings and fittings.

BENT PIPE



We have equipment and dies for bending pipe in the simpler forms of bends. Prices quoted on application.

RAILWAY SIGNAL PIPE



Signal pipe as used by the railways can be made up to order promptly.

All list prices quoted above are for black pipe, an extra will be charged when pipe is required galvanized or asphaltum coated. For pipe smoothed on the inside, known as reamed and drifted, an extra charge will be made above Standard Pipe.

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SCALE FREE STEEL PIPE—Cont'd

NIPPLES



Close Nipple



Short Nipple



Long Nipple

List Prices and Table of Sizes—Reamed and Chamfered

Size Inches	Length Inches						Black Right Hand		Galvanized Right Hand		Black Right & Left Hand	
	Close	Short	Long				Close or Short	Long	Close or Short	Long	Close or Short	Long
1/8	3/4	1 1/2	2	2 1/2	3	3 1/2	\$0.04	\$0.06	\$0.06	\$0.11	\$0.05	\$0.08
1/4	7/8	1 1/2	2	2 1/2	3	3 1/2	.04	.06	.06	.11	.05	.08
3/8	1	1 1/2	2	2 1/2	3	3 1/2	.04	.06	.06	.11	.05	.08
1/2	1 1/8	1 1/2	2	2 1/2	3	3 1/2	.05	.07	.06	.11	.07	.10
3/4	1 3/8	2	2 1/2	3	3 1/2	4	.06	.09	.08	.14	.08	.12
1	1 1/2	2	2 1/2	3	3 1/2	4	.08	.13	.11	.19	.11	.18
1 1/4	1 5/8	2 1/2	3	3 1/2	4	4 1/2	.11	.17	.17	.29	.15	.23
1 1/2	1 3/4	2 1/2	3	3 1/2	4	4 1/2	.13	.20	.21	.35	.18	.27
2	2	2 1/2	3	3 1/2	4	4 1/2	.18	.27	.27	.47	.24	.36
2 1/2	2 1/2	3	3 1/2	4	4 1/2	5	.39	.59	.56	.86	.52	.79
3	2 1/2	3	3 1/2	4	4 1/2	5	.48	.72	.70	1.10	.65	.96
3 1/2	2 3/4	4	4 1/2	5	5 1/2	6	.75	1.05	1.20	1.70	1.00	1.40
4	3	4	4 1/2	5	5 1/2	6	.85	1.20	1.35	1.87	1.15	1.60
4 1/2	3	4	4 1/2	5	5 1/2	6	1.25	1.70	1.85	2.60	....	....
5	3 1/2	4 1/2	5	5 1/2	6	6 1/2	1.55	2.45	2.30	3.15	....	....
6	3 1/2	4 1/2	5	5 1/2	6	6 1/2	1.85	2.90	2.80	4.25	....	....
7	4	5	6	....	....	....	3.20	3.60	4.25	4.95	....	....
8	4	5	6	....	....	....	3.55	4.05	5.00	5.80	....	....

Extra Long Black Nipples--Right Hand

Size, Inches	Length, Inches								
	4	5	6	7	8	9	10	11	12
1/8	\$0.07	\$0.08	\$0.10	\$0.12	\$0.14	\$0.15	\$0.17	\$0.18	\$0.19
1/4	.07	.08	.10	.12	.14	.15	.17	.18	.19
3/8	.07	.08	.10	.12	.14	.15	.17	.18	.19
1/2	.08	.10	.12	.14	.16	.18	.20	.22	.23
3/4	....	.11	.13	.17	.18	.20	.22	.24	.26
1	....	.15	.18	.23	.25	.28	.31	.34	.36
1 1/4	....	.20	.24	.29	.33	.36	.40	.44	.47
1 1/2	....	.25	.29	.36	.40	.45	.50	.54	.59
2	....	.32	.38	.50	.54	.59	.65	.72	.77
2 1/2	....	....	.68	.90	.97	1.06	1.17	1.26	1.35
3	....	....	.85	1.08	1.20	1.33	1.45	1.58	1.70
3 1/2	....	....	....	1.30	1.45	1.60	1.75	1.90	2.05
4	....	....	....	1.52	1.69	1.87	2.05	2.22	2.40
4 1/2	....	....	....	2.25	2.50	2.75	2.95	3.17	3.40
5	....	....	....	2.58	2.83	3.10	3.35	3.60	3.85
6	....	....	....	3.05	3.35	3.70	4.00	4.30	4.65
7	....	....	3.60	4.05	4.45	4.90	5.30	5.75	6.15
8	....	....	4.05	4.55	5.05	5.50	6.00	6.50	7.00

Nipples made to order from extra heavy pipe at double above list prices. When Assorted Long Nipples are ordered we will ship equal quantities of each of the four Long Lengths in the table above.

For prices of Right and Left Hand Galvanized Nipples, add 60% to Right and Left Hand Black List shown above.



SCALE FREE STEEL PIPE—Cont'd

List Prices of Extra Long Galvanized Nipples—Right Hand—Reamed and Chamfered

Size Inches	Length, Inches								
	4	5	6	7	8	9	10	11	12
1/8	\$0.12	\$0.15	\$0.17	\$0.21	\$0.24	\$0.26	\$0.29	\$0.31	\$0.34
1/4	.12	.15	.17	.21	.24	.26	.29	.31	.34
3/8	.12	.15	.17	.21	.24	.26	.29	.31	.34
1/2	.13	.16	.18	.23	.26	.28	.31	.33	.36
3/4	....	.18	.21	.26	.29	.32	.35	.38	.41
1	....	.24	.28	.34	.38	.42	.47	.51	.55
1 1/4	....	.32	.38	.45	.51	.57	.63	.69	.75
1 1/2	....	.39	.46	.55	.63	.70	.77	.84	.91
2	....	.52	.61	.74	.83	.93	1.03	1.13	1.23
2 1/2	....	....	1.00	1.26	1.41	1.56	1.71	1.86	2.01
3	....	....	1.30	1.60	1.80	2.00	2.20	2.40	2.60
3 1/2	....	....	....	2.10	2.35	2.60	2.85	3.15	3.40
4	....	....	....	2.30	2.60	2.90	3.20	3.50	3.80
4 1/2	....	....	....	3.30	3.65	4.05	4.45	4.85	5.25
5	....	....	....	3.75	4.20	4.60	5.00	5.40	5.85
6	....	....	....	4.50	5.00	5.55	6.05	6.60	7.15
7	....	....	4.95	5.65	6.35	7.05	7.75	8.45	9.20
8	....	....	5.80	6.65	7.50	8.35	9.25	10.10	10.95

List Prices of Extra Long Black Nipples—Right and Left—Reamed and Chamfered

Size Inches	Length, Inches								
	4	5	6	7	8	9	10	11	12
1/8	\$0.09	\$0.11	\$0.13	\$0.16	\$0.18	\$0.20	\$0.23	\$0.25	\$0.27
1/4	.09	.11	.13	.16	.18	.20	.23	.25	.27
3/8	.09	.11	.13	.16	.18	.20	.23	.25	.27
1/2	.11	.13	.16	.18	.21	.24	.27	.29	.31
3/4	....	.15	.17	.23	.25	.27	.29	.32	.35
1	....	.20	.24	.31	.33	.37	.41	.45	.48
1 1/4	....	.27	.32	.39	.45	.50	.55	.60	.65
1 1/2	....	.34	.39	.48	.52	.60	.67	.72	.80
2	....	.43	.51	.67	.72	.80	.87	.96	1.03
2 1/2	....	....	.91	1.20	1.30	1.40	1.55	1.68	1.80
3	....	....	1.13	1.44	1.60	1.77	1.93	2.10	2.27
3 1/2	....	....	....	1.75	1.95	2.15	2.35	2.55	2.75
4	....	....	....	2.00	2.25	2.50	2.75	3.00	3.25

For prices of Right and Left Hand Galvanized Nipples add 60% to the Right and Left Hand Black List above.

Net extra charge for Threading Nipples over the Standard Length of Thread.

Size, Inches	Standard Length of Thread, Inches	Net Extra for Each Additional 1/4 Inch or Fractions of Thread per 100 Nipples	Size, Inches	Standard Length of Thread, Inches	Net Extra for Each Additional 1/4 Inch or Fractions of Thread per 100 Nipples
1/4	7/16	\$0.15	1 1/2	7/8	\$0.40
3/8	1/2	.15	2	1	.45
1/2	1/2	.20	2 1/2	1 1/4	.50
3/4	1 1/16	.25	3	1 1/4	.55
1	3/4	.30	3 1/2	1 3/8	.60
1 1/4	3/4	.35	4	1 1/2	.65

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SCALE FREE STEEL PIPE—Cont'd

IMPROVED COUPLINGS



Stelco Couplings are known as "improved couplings" because they are made from specially prepared steel possessing extra strength and special tapping qualities. In diameters up to 1½" they are solid or seamless. In diameters 2" and larger they are heavy forged.

List Prices and Dimensions of Standard Couplings

Size of Pipe Inches	Black, Price, Each	Galvanized, Price, Each	Nominal Outside Diameter, Inches	Length of Couplings, Inches	Average Weight of Couplings, Pounds	No. of Threads Per Inch of Screw
1/8	\$0.05	\$0.06	19/32	15/16	.03	27
1/4	.05	.06	25/32	1	.07	18
3/8	.06	.08	63/64	1 1/8	.11	18
1/2	.07	.10	15/16	1 1/8	.15	14
3/4	.10	.13	125/64	1 5/8	.25	14
1	.13	.18	145/64	1 7/8	.42	11 1/2
1 1/4	.17	.25	23/32	2 1/4	.60	11 1/2
1 1/2	.21	.32	219/64	2 1/4	.81	11 1/2
2	.28	.40	227/32	2 1/2	1.18	11 1/2
2 1/2	.40	.55	35/16	3	1.70	8
3	.60	.80	37/8	3 1/4	2.45	8
3 1/2	.80	1.05	415/32	3 3/4	3.40	8
4	1.00	1.40	51/32	3 3/4	3.50	8
4 1/2	1.50	2.00	517/32	3 7/8	4.70	8
5	1.65	2.25	61/4	4 1/8	8.50	8
6	2.40	3.25	79/32	4 1/8	9.70	8
7	3.25	4.20	89/32	4 1/8	11.10	8
8	4.25	5.50	91/4	4 5/8	13.60	8

Extra Heavy Weight Couplings, Extra long lengths and tapered threads for line pipe or other special work are sold at double the above prices.

ADJUSTABLE PIPE HANGERS



Stelco Adjustable Pipe Hangers are made of a soft, ductile steel and are furnished in straight lengths ten feet long. The illustrations show how the operator can bend the material on the job to suit whatever style of hanger he prefers. Material is full gauge specified and holes are properly centred and accurately spaced.

No.	Size	For Pipe—Diameter	List Price per 100 feet	Feet per Bundle	Approx. Weight per Bdle. Lbs.
1	3/8" x No. 16 Gauge	1/2" to 1 1/2" inclusive	\$1.60	200	30
2	1" x No. 14 "	2" to 3" "	2.00	100	25
3	1 1/2" x No. 12 "	3 1/2" to 6" "	3.50	100	31



SCALE FREE STEEL PIPE—*Cont'd*

VELOCITY OF FLOW OF WATER

In feet per minute, through pipes of various sizes, for varying quantities of flow.

Gallons Discharged Per Minute	$\frac{3}{4}$ Inch	1 Inch	$1\frac{1}{4}$ Inches	$1\frac{1}{2}$ Inches	2 Inches	$2\frac{1}{2}$ Inches	3 Inches	4 Inches
5	218	$122\frac{1}{2}$	$78\frac{1}{2}$	$54\frac{1}{2}$	$30\frac{1}{2}$	$19\frac{1}{2}$	$13\frac{1}{2}$	$7\frac{2}{3}$
10	436	245	157	109	61	38	27	$15\frac{1}{3}$
15	653	$367\frac{1}{2}$	$235\frac{1}{2}$	$163\frac{1}{2}$	$91\frac{1}{2}$	$58\frac{1}{2}$	$40\frac{1}{2}$	23
20	872	490	314	218	122	78	54	$30\frac{2}{3}$
25	1090	$612\frac{1}{2}$	$392\frac{1}{2}$	$272\frac{1}{2}$	$152\frac{1}{2}$	$97\frac{1}{2}$	$67\frac{1}{2}$	$38\frac{1}{2}$
30		735	451	327	183	117	81	46
35		$857\frac{1}{2}$	$549\frac{1}{2}$	$381\frac{1}{2}$	$213\frac{1}{2}$	$136\frac{1}{2}$	$94\frac{1}{2}$	$53\frac{2}{3}$
40		980	628	436	244	156	108	$61\frac{1}{3}$
45		$1102\frac{1}{2}$	$706\frac{1}{2}$	$490\frac{1}{2}$	$274\frac{1}{2}$	$175\frac{1}{2}$	$121\frac{1}{2}$	69
50			785	545	305	195	135	$76\frac{2}{3}$
75			$1177\frac{1}{2}$	$817\frac{1}{2}$	$457\frac{1}{2}$	$292\frac{1}{2}$	$202\frac{1}{2}$	115
100				1090	610	380	270	$153\frac{1}{3}$
125					$762\frac{1}{2}$	$487\frac{1}{2}$	$337\frac{1}{2}$	$191\frac{2}{3}$
150					915	585	405	230
175					$1067\frac{1}{2}$	$682\frac{1}{2}$	$472\frac{1}{2}$	$268\frac{1}{3}$
200					1220	780	540	$306\frac{2}{3}$

LOSS OF PRESSURE

Due to friction, in pounds per square inch, for pipe 100 feet long.

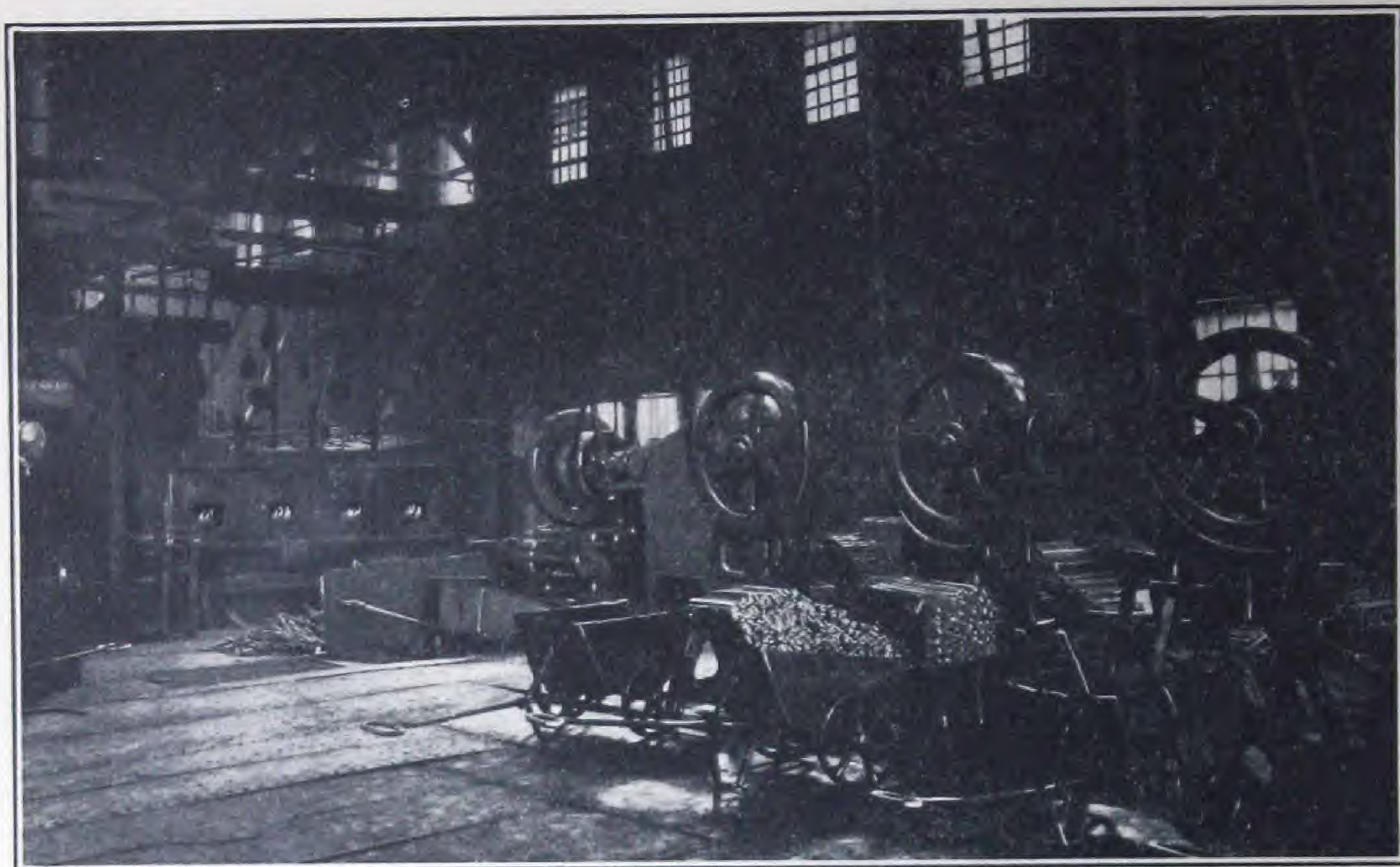
Gallons Discharged Per Minute	$\frac{3}{4}$ Inch	1 Inch	$1\frac{1}{4}$ Inches	$1\frac{1}{2}$ Inches	2 Inches	$2\frac{1}{2}$ Inches	3 Inches	4 Inches
5	3.3	.84	.31	.12				
10	13.0	3.16	1.05	.47	.12			
15	28.7	6.98	2.38	.97				
20	50.4	12.3	4.07	1.66	.42			
25	78.0	19.0	6.40	2.62		.21	.10	
30		27.5	9.15	3.75	.91			
35		37.0	12.4	5.05				
40		48.0	16.1	6.52	1.60			
45			20.2	8.15				
50			24.9	10.0	2.44	.81	.35	.09
75			56.1	22.4	5.32	1.80	.74	
100				3.90	9.46	3.20	1.31	.33
125					14.9	4.89	1.99	
150					21.2	7.0	2.85	.69
175					28.1	9.46	3.85	
200					37.5	12.47	5.02	1.22



The pipe for
all purposes



HORSE SHOES



Portion of the Horse Shoe Manufacturing Department at Notre Dame Works



BRAND

M.R.M. Horse Shoes have a reputation of many years' standing with Canadian farriers. This line comprises a number of patterns suitable for different classes of shoeing. The material being entirely of our own manufacture, is long wearing yet excellent for forging and welding. Shoes are formed over standard pattern dies, thus assuring absolute uniformity in shape and design for each pattern. Uniformity of design has a real bearing on the accuracy of the nail punching, and is a great assistance to the farrier when applying the shoe.

*Packed in Kegs of 100 lbs.
of a size; Fronts or Hinds,
separately or assorted.*



*Large stocks of pat-
terns illustrated in
this catalogue are
always on hand ready
for shipment.*

All shoes are Branded.



HORSE SHOES—Cont'd



LIGHT PATTERN



Front

Size Nos.	0	1	2	3	4	5	6	7
Weight each, ounces	12	14½	17½	21	25½	31½	38	44

Sizes Nos. 0 to 5, Heels turned in.
 Sizes Nos. 6 to 7, Heels turned out.



Hind

Size Nos.	0	1	2	3	4	5	6	7
Weight each, ounces	9	12	15½	18	21½	27	31	35

Sizes Nos. 0 to 7, Heels turned out.



MEDIUM PATTERN



Front

Size Nos.	1	2	3	4	5	6	7	8
Weight each, ounces	17	21	25	30	35½	42	47	56

Sizes Nos. 1 to 5, Heels turned in.
 Sizes Nos. 6 to 8, Heels turned out.



Hind

Size Nos.	1	2	3	4	5	6	7	8
Weight each, ounces	14	17	21½	26	30	34	39	30½

Sizes Nos. 1 to 8, Heels turned out.

Packed in kegs of 100 pounds



The Keg with the Blue Hoop identifies them

Prices on application



HORSE SHOES—Cont'd



HEAVY PATTERN



Front

Size Nos.	6	7	8
Weight each, ounces.	46	51	56



Hind

Size Nos.	6	7	8
Weight each, ounces.	38	45	50



HEAVY DRAFT PATTERN



Front

Size Nos.	5	6	7
Weight each, ounces.	45½	51½	59½



Hind

Size Nos.	5	6	7
Weight each, ounces.	45½	51½	59½

Packed in Kegs of 100 pounds



Prices on Application.

The Keg with the Blue Hoop identifies them.



HORSE SHOES—Cont'd



SNOW PATTERN

Made of the best quality welding steel.



Front

Size Nos.	1	2	3	4	5	6	7
Weight each, ounces.	12	14½	18	22	26	30	35



Hind

Size Nos.	1	2	3	4	5	6	7
Weight each, ounces.	10	12	15	18	22	26	35

LIGHT "XL" STEEL PATTERN

Made of the best quality welding steel.



Front

Size Nos.	1	2	3	4	5	6
Weight each, ounces.	12½	15	18½	22½	26	31



Hind

Size Nos.	1	2	3	4	5	6
Weight each, ounces.	10	13	15½	18	21	25½

Packed in kegs of 100 pounds



Prices on application

The Keg with the Blue Hoop identifies them

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HORSE SHOES—Cont'd



FEATHERWEIGHT "XXL" STEEL PATTERN *Made of the best quality welding steel*



Front

Size Nos.	0	1	2	3	4
Weight each, ounces.	8½	10	12	14	17½



Hind

Size Nos.	0	1	2	3	4
Weight each, ounces.	7½	8½	10	12½	15

SPECIAL COUNTERSUNK PATTERN *Made of the best quality welding steel*



Front

Size Nos.	1	2	3	4
Weight each, ounces.	10	12½	15	18
No. of Holes each side.	3	3	4	4



Hind

Size Nos.	1	2	3	4
Weight each, ounces.	8½	10	12	14
No. of Holes each side.	3	3	4	4

Packed in kegs of 100 pounds



Prices on application

The Keg with the Blue Hoop identifies them.



HORSE SHOES—*Cont'd*



Bell Brand Horse Shoes are made from a special quality soft steel produced in our own mills. The quality of the material has been determined by experience as the most suitable for making horse shoes, a material which will render the longest service, and at the same time possesses the requisite welding qualities.

Bell Shoes are uniform in weight and style, well creased, with holes punched clean and properly spaced. The shapes are in accordance with modern ideas and have met with the approval of practical horse shoers wherever used.

The inspection of our shoes is most thorough, and the ultimate user can depend on finding only perfect shoes in a keg. The operations at all stages of manufacture are watched and checked by experts.

These Shoes are manufactured in the various styles shown in the following pages.

Packed in kegs, 100 lbs. of a size, Fronts or Hinds, separately or assorted.

All shoes are branded.

LIGHT PATTERN



Front



Hind

Size Nos.	0	1	2	3	4	5	6	7
Weight each, ounces	12	15	17½	21½	24¾	30	36	41

Size Nos.	0	1	2	3	4	5	6	7
Weight each, ounces	9½	12½	14¾	18	21¼	25½	29½	34

Packed in Kegs of 100 pounds



Prices on application

The Keg with the Red Hoop identifies them

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BRAND

HORSE SHOES—Cont'd



BRAND

MEDIUM PATTERN



Front

Size Nos.....	1	2	3	4	5	6	7	8
Weight each, ounces.....	17	21	26½	30½	36	43½	50	55



Hind

Size Nos.....	1	2	3	4	5	6	7	8
Weight each, ounces.....	14	18	22	27	31	36	41½	48¼

LIGHT STEEL PATTERN *Made from the best welding steel*



Front

Size Nos.....	1	2	3	4	5	6
Weight each, ounces.....	13½	16	19½	23	27	31



Hind

Size Nos.....	1	2	3	4	5	6
Weight each, ounces.....	10½	13¼	16	19	21½	26½

Packed in kegs of 100 pounds



Prices on application

The Keg with the Red Hoop identifies them

HORSE NAILS



Illustration shows hand inspection of nails before packing

Champion
Horse Nails
"are a cinch
to drive
and clinch"



Uniformity of material and design is most essential in Horse Nails. The farrier is most exacting in the quality of the nails he uses. Horse Nails must possess excellent driving qualities and holding power, qualities which can be obtained only by the choice of proper material. Control of material from ore to finished article and production on the most up-to-date equipment places our brands of Horse Nails foremost with Canadian farriers.

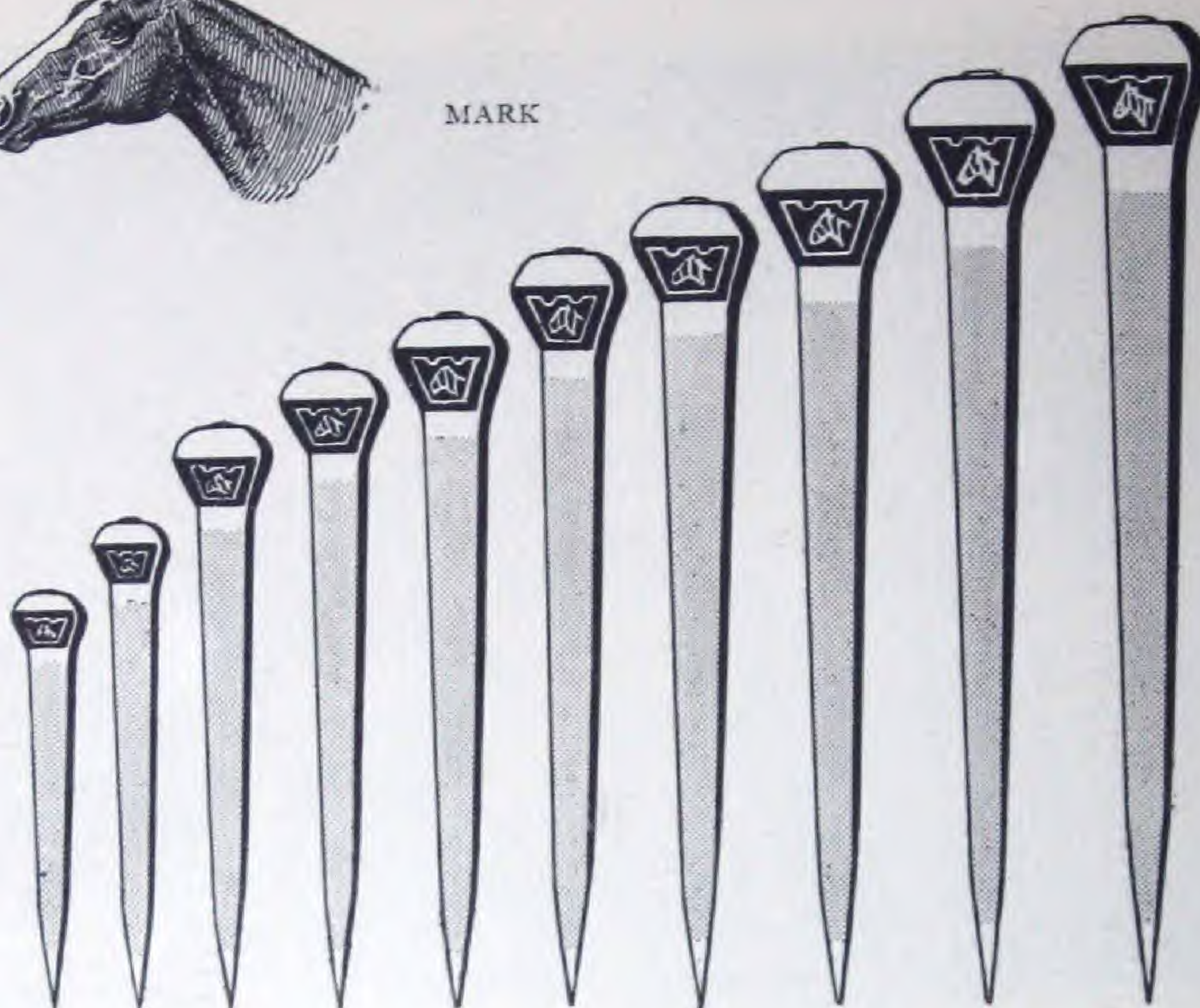
Champion Horse Nails have established themselves as Canada's finest Horse Nail. They are made from a particularly high quality material, hard enough for proper driving, yet pliable enough to clinch. Farriers who use them state they are the best holding nail on the market. Hand inspection of every nail before packing assures full weight of perfectly formed nails in every package. Champion Horse Nails can be identified by the horse's head embossed on the front of the nail head.

M. R. M. Horse Nails have served the Canadian farrier for many many years. The original production of these nails was by the hot forged process, but as methods and equipment have improved so have the methods of production and quality of M. R. M. Horse Nails. All M. R. M. Horse Nails are hand inspected before packing and every package is guaranteed to contain perfect nails only. M. R. M. Horse Nails are identified by the upright grooves or scores on the face of the head.

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STELCO
MADE

HORSE NAILS—*Cont'd*



Champion

Horse Nails

"are a cinch to drive and clinch"

Size Nos.	3	4	5	6	7	8	9	10	11	12
Length, Inches	1 $\frac{5}{8}$	1 $\frac{3}{4}$	1 $\frac{15}{16}$	2 $\frac{1}{8}$	2 $\frac{5}{16}$	2 $\frac{1}{2}$	2 $\frac{11}{16}$	2 $\frac{7}{8}$	3 $\frac{1}{16}$	3 $\frac{1}{4}$

PACKAGING

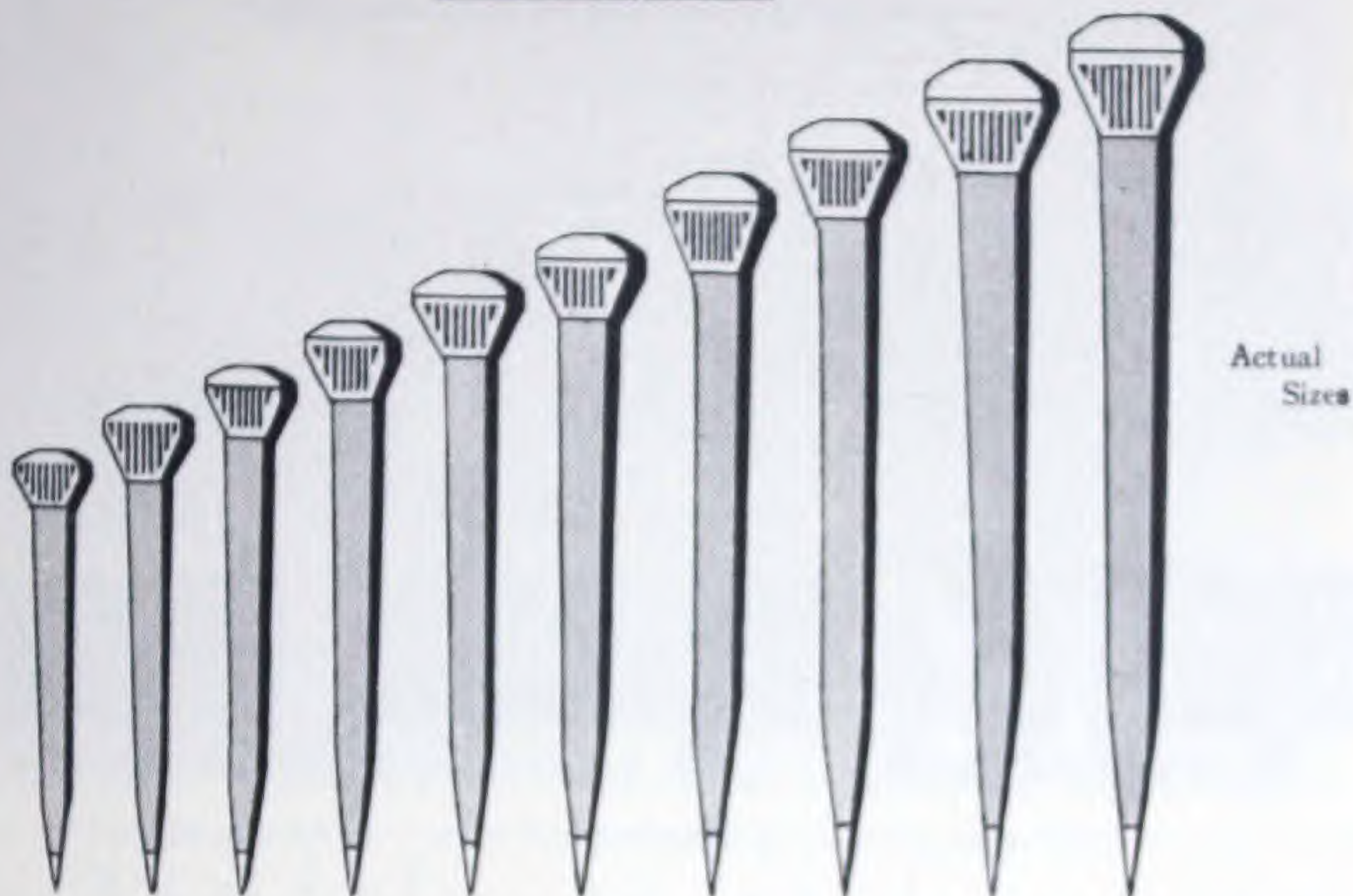
Packed Nos. 3 and 4, put up in 1 lb. net weight cartons,
Nos. 5 to 12, put up in 5 lb. net weight cartons.
All packed in 25 lb. boxes.



Prices on Application.



HORSE NAILS—Cont'd



REGULAR HEAD

Size Nos.	3	4	5	6	7	8	9	10	11	12
Length, Inches . . .	$1\frac{5}{8}$	$1\frac{3}{4}$	$1\frac{15}{16}$	$2\frac{1}{8}$	$2\frac{13}{16}$	$2\frac{1}{2}$	$2\frac{11}{16}$	$2\frac{7}{8}$	$3\frac{1}{16}$	$3\frac{1}{4}$

PACKAGING

Packed Nos. 3 and 4, put up in 1 lb. net weight cartons.
Nos. 5 to 12, put up in 5 lb. net weight cartons.
All packed in 25 lb. boxes.



Prices on application.

15
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TOE AND HEEL CALKS

TIGER



EASYWELD

BRAND



A dependable, uniform quality steel made in our own plants from the ore for the specific purpose of manufacturing calks, is the secret back of the Tiger Calks easy welding quality. A good secure weld is obtained every time, we have made certain of that in the production of the steel. Moreover the nibs are shaped to drive easily and are rigid enough not to bend or buckle when driven into a heated shoe.

Calks are carefully inspected and packed 25 pounds in a box. Prices on application.

SHARP

BLUNT

COUNTRY

No.	Height	Width	Med.	Long	Ex. Long	XXL	No.	Height	Top to Bottom	Med.	Long	Ex. Long	XXL	No.	Height	Width on Bottom	Med.	Long	Ex. Long	XXL
0	$\frac{1}{2} \times \frac{3}{8}$		$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	0	$\frac{7}{16} \times \frac{3}{8} \times \frac{9}{32}$		$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	0	$\frac{7}{16} \times \frac{5}{16}$		$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$
1	$\frac{5}{8} \times \frac{7}{16}$		$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$	1	$\frac{1}{2} \times \frac{3}{8} \times \frac{9}{32}$		$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	1	$\frac{1}{2} \times \frac{5}{16}$		$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$
2	$\frac{3}{4} \times \frac{1}{2}$		2	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	2	$\frac{9}{16} \times \frac{7}{16} \times \frac{11}{32}$		$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$	2	$\frac{5}{8} \times \frac{11}{32}$		$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$
3	$\frac{7}{8} \times \frac{9}{16}$		$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	3	3	$\frac{5}{8} \times \frac{1}{2} \times \frac{13}{32}$		2	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	3	$\frac{23}{32} \times \frac{7}{16}$		2	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$
4	$\frac{15}{16} \times \frac{9}{16}$		$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{4}$	4	$\frac{3}{4} \times \frac{1}{2} \times \frac{13}{32}$		$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	3	4	$\frac{7}{8} \times \frac{7}{16}$		$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	3
5	$1 \times \frac{5}{8}$		$2\frac{3}{4}$	3	$3\frac{1}{4}$	$3\frac{1}{2}$	5	$\frac{13}{16} \times \frac{9}{16} \times \frac{1}{2}$		$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{4}$	5	$\frac{7}{8} \times \frac{1}{2}$		$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{4}$
6	$1\frac{1}{16} \times \frac{5}{8}$		3	$3\frac{1}{4}$	$3\frac{1}{2}$	$3\frac{3}{4}$	6	$\frac{7}{8} \times \frac{9}{16} \times \frac{17}{32}$		$2\frac{3}{4}$	3	$3\frac{1}{4}$	$3\frac{1}{2}$	6	$\frac{15}{16} \times \frac{9}{16}$		$2\frac{3}{4}$	3	$3\frac{1}{4}$	$3\frac{1}{2}$
7	$1\frac{1}{16} \times \frac{5}{8}$		$3\frac{1}{4}$	$3\frac{1}{2}$	$3\frac{3}{4}$	4	7	$\frac{15}{16} \times \frac{19}{32} \times \frac{17}{32}$		3	$3\frac{1}{4}$	$3\frac{1}{2}$	$3\frac{3}{4}$							

SPECIAL

Medium
Blunt

BLUNT

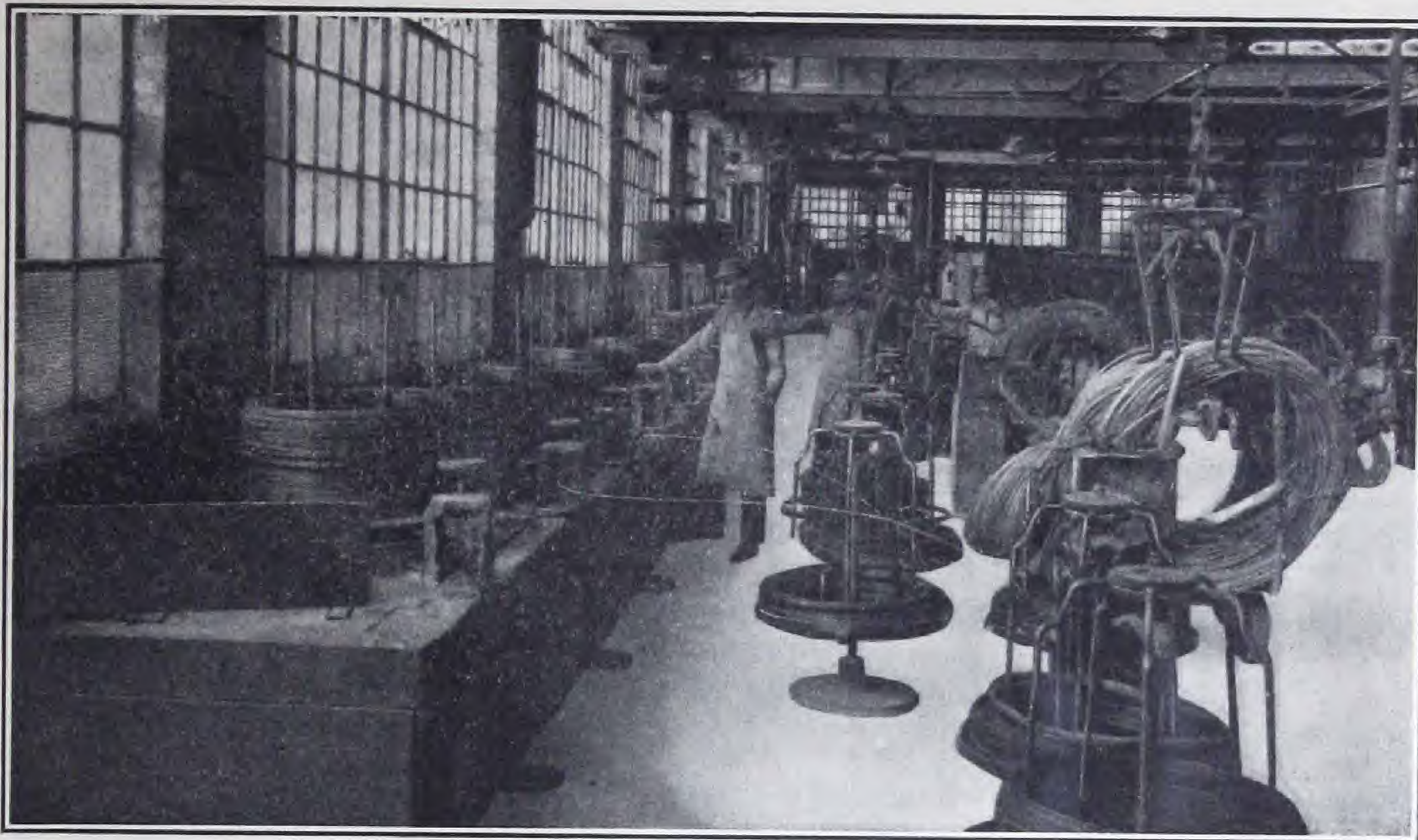
Heel
Calks

Sizes	Med.	Long	Ex. Long	XXL
$\frac{3}{8} \times \frac{1}{2}$ Flat.....	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$
$\frac{1}{2} \times \frac{1}{2}$ Square.....	2	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$
$\frac{1}{2} \times \frac{5}{8}$ Flat.....	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	3
$\frac{1}{2} \times \frac{3}{4}$ Flat.....	$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{4}$
$\frac{5}{8} \times \frac{5}{8}$ Square.....	$2\frac{3}{4}$	3	$3\frac{1}{4}$	$3\frac{1}{2}$

Special Sizes to keep the Shoe close to the ground.

No.	Height	Top	Bottom	Length
3	$\frac{5}{8}$	$\times \frac{1}{2}$	$\times \frac{13}{32}$	1
4	$\frac{3}{4}$	$\times \frac{1}{2}$	$\times \frac{13}{32}$	$1\frac{1}{8}$
5	$\frac{13}{16}$	$\times \frac{9}{16}$	$\times \frac{1}{2}$	$1\frac{1}{4}$
6	$\frac{7}{8}$	$\times \frac{9}{16}$	$\times \frac{17}{32}$	$1\frac{3}{8}$
7	$\frac{15}{16}$	$\times \frac{19}{32}$	$\times \frac{17}{32}$	$1\frac{1}{2}$

WIRE



View showing several of the Wire Drawing Blocks at the Hamilton Plant

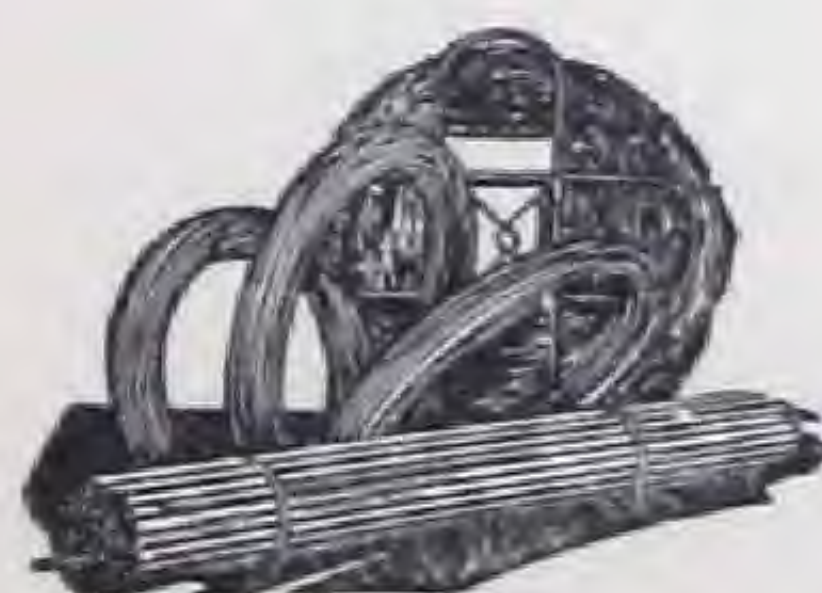
Wire drawing has been practiced for more than a thousand years, yet most of the refinements in the art have been developed in the last fifty or sixty years. Even during the last five years great changes in practice have developed.

The mere drawing of wire may, to the ordinary observer, appear to be a comparatively simple operation, yet the constant tightening of specifications and the ever increasing demand for new and special grades of Wire, adaptable for certain definite purposes, have had the effect of making Wire manufacturing a very complicated business. Only a company with many years' experience and employing experts, can meet the ever changing requirements of the trade.

There is, however, something beyond this, and that is the quality of the steel. In this respect we occupy a unique position by controlling our manufacture from the Iron Ore, through our own Blast Furnaces, Steel Furnaces, Bloom, Billet and Rod Mills, thence to our finishing departments at the wire drawing end.

We have behind us sixty-four years' experience in the art of wire drawing, which is utilized in the three plants of this Company. Our Wire Mills are located at Hamilton, Montreal and Lachine, and are each equipped for the production of many grades of Wire for all types of requirements.

May we suggest that when enquiring for a quality of Wire not secured from us previously, that you send us a sample at least two feet in length. Where a sample is not available we will gladly develop a quality to suit your particular needs.





EXPLANATION OF DIFFERENT GAUGES

No. 1. The standard in Canada and the United States for brass and copper wire and sheets made for electrical purposes known by the initials B. & S.

No. 2. The Birmingham Wire Gauge, also known as Stubbs Iron Wire Gauge. Used in England as the standard for iron and steel wire, and by some makers in the United States. It is used by the Steel Company of Canada, Limited, for rivets. Used by some American makers to gauge hoops, bands and boiler tubes thinner than $\frac{3}{16}$ inch. Known by the initials B.W.G.

No. 3. The most generally used American gauge for iron and steel wire. It is the old Washburn & Moen standard. Known by the initials A.S. & W. Used by the Steel Company of Canada for drawing steel wire 27 gauge and finer.

No. 4. The legal wire gauge of Great Britain. It is the Canadian Customs standard for metal sheets, plates, and wire, and the standard of the Steel Company of Canada, Limited, for steel and iron wire No. 26 and larger. Known by the initials S.W.G. Sometimes also called New British Gauge or N.B.G.

No. 5. Properly called the Birmingham Sheet and Hoop Iron Gauge, or B.G. Issued March 31st, 1884, by the South Staffordshire Iron Masters' Association for the use of sheet and hoop iron makers, and is the gauge used by them. Known by the initials, B.G.

No. 6. Established by United States Congress, March 3rd, 1893, as the standard for iron and steel sheets and plates. Known by the initials U.S.G. It is used for gauging all sheets made by the Steel Company of Canada, Limited.

No. 7. Used by machine and wood screw manufacturers in Canada and the United States. The difference between consecutive gauges is .01316 inch. Known by the initials S.G.

To avoid errors and doubt as to the gauge referred to use the initials at the top of the columns in the table below.

As various names and abbreviations are sometimes applied to exactly the same gauge, the following may prove of interest and value:—New British Standard, N.B.S., sometimes referred to as Standard Wire Gauge, S.W.G., Imperial Wire Gauge, I.W.G. Brown & Sharpe Gauge, B. & S., sometimes referred to as American Wire Gauge, A.W.G. Birmingham Wire Gauge, B.W.G., sometimes referred to as Stubbs Wire Gauge, S.W.G., Old English Standard, E.S.G., Iron Wire Gauge, I.W.G.

WIRE, METAL SHEET AND SCREW GAUGE STANDARDS

In use in Great Britain, Canada and United States

Dimensions of Sizes in Decimals of an Inch

Gauge Number	1 Brown & Sharp's B. & S.	2 Birmingham Wire Gauge B.W.G.	3 American Steel & Wire Co. A.S. & W.	4 British Imperial Standard S.W.G.	5 Birmingham Gauge B.G.	6 U.S. Standard U.S.G.	7 Machine & Wood Screw Gauge S.G.	Gauge Number
7/0			.4900	.500		.500		7/0
6/0	.5800		.4615	.464		.46875		6/0
5/0	.5165	.500	.4305	.432		.4375		5/0
4/0	.46	.454	.3938	.400		.40625		4/0
3/0	.40964	.425	.3625	.372	.500	.375	.03151	3/0
2/0	.3648	.380	.3310	.348	.4452	.34375	.04468	2/0
0	.32486	.340	.3065	.324	.3964	.3125	.05784	0
1	.2893	.300	.2830	.300	.3532	.28125	.07100	1
2	.25763	.284	.2625	.276	.3147	.265625	.08416	2
3	.22942	.259	.2437	.252	.2804	.25	.09732	3
4	.20431	.238	.2253	.232	.250	.234375	.11048	4
5	.18194	.22	.2070	.212	.2225	.21875	.12364	5
6	.16202	.203	.1920	.192	.1981	.203125	.13680	6
7	.14428	.18	.1770	.176	.1764	.1875	.14996	7
8	.12849	.165	.1620	.160	.1570	.171875	.16312	8
9	.11443	.148	.1483	.144	.1398	.15625	.17628	9
10	.10189	.134	.1350	.128	.1250	.140625	.18944	10
11	.090742	.12	.1205	.116	.1113	.125	.20260	11
12	.080808	.109	.1055	.104	.0991	.109375	.21576	12
13	.071961	.095	.0915	.092	.0882	.09375	.22892	13
14	.064084	.083	.0800	.080	.0875	.078125	.24208	14
15	.057068	.072	.0720	.072	.0699	.0703125	.25524	15
16	.05082	.065	.0625	.064	.0625	.0625	.26840	16
17	.045257	.058	.0540	.056	.0556	.05625	.28156	17
18	.040303	.049	.0475	.048	.0495	.05	.29472	18
19	.03589	.042	.0410	.040	.0440	.04375	.30788	19
20	.031961	.035	.0348	.036	.0392	.0375	.32104	20
21	.028462	.032	.0317	.032	.0349	.034375	.33420	21
22	.025347	.028	.0286	.028	.03125	.03125	.34736	22
23	.022571	.025	.0258	.024	.02782	.028125	.36052	23
24	.0201	.022	.0230	.022	.02476	.025	.37368	24
25	.0179	.02	.0204	.020	.02204	.021875	.38684	25
26	.01594	.018	.0181	.018	.01961	.01875	.40000	26
27	.014195	.016	.0173	.0164	.01745	.0171875	.41316	27
28	.012641	.014	.0162	.0149	.015625	.015625	.42632	28
29	.011257	.013	.0150	.0136	.0139	.0140625	.43948	29
30	.010025	.012	.0140	.0124	.0123	.0125	.45264	30
31	.008928	.01	.0132	.0116	.0110	.0109375	.46580	31
32	.00795	.009	.0128	.0108	.0098	.01015625	.47896	32
33	.00708	.008	.0118	.0100	.0087	.009375	.49212	33
34	.006304	.007	.0104	.0092	.0077	.00859375	.50528	34
35	.005614	.005	.0095	.0084	.0069	.0078125	.51844	35
36	.005	.004	.0090	.0076	.0061	.00703125	.53160	36
37	.004453		.0085	.0068		.006640625	.54476	37
38	.003965		.0080	.0060		.00625	.55792	38
39	.003531		.0075	.0052			.57108	39
40	.003144		.0070	.0048			.58424	40



WIRE—Cont'd

IMPERIAL STANDARD WIRE GAUGE

Comparison of Dimensions expressed in Fractions and Decimals of an inch and Millimetres also Weights and Breaking Strains

Actual Size of Wire	Actual		M/M	Nearest Fraction of an Inch	Sectional Area Square Inches	Weight of 100 Feet in pounds	Weight of one Mile in pounds	Length of 100 lbs. in feet	Breaking Strain Annealed in pounds	Breaking Strain Bright in pounds
	S.W.G. No.	Decimals of Inch								
0000000	0000000	.500	12.700	1/2	.1963	66.7	3,522	150	10,470	15,700
	000000	.464	11.785	15/32	.1691	57.44	3,033	174	9,017	13,525
	000000	.432	11.306	7/16	.1466	49.79	2,629	201	7,814	11,725
	0000	.400	10.160	13/32	.1257	42.69	2,254	233	6,702	10,052
	000	.372	9.448	3/8	.1087	36.93	1,950	271	5,796	8,694
	00	.348	8.839	11/32	.0951	32.31	1,706	308	5,072	7,608
	0	.324	8.229	21/64	.0824	28.01	1,479	356	4,397	6,595
	1	.300	7.620	19/64	.0707	24.01	1,268	415	3,770	5,655
	2	.276	7.010	9/32	.0598	20.32	1,073	490	3,190	4,785
	3	.252	6.400	1/4	.0499	16.95	895	589	2,660	3,990
	4	.232	5.892	15/64	.0423	14.36	758	696	2,254	3,381
	5	.212	5.384	7/32	.0353	11.99	633	833	1,883	2,824
	6	.192	4.876	3/16	.0290	9.85	520	1,018	1,544	2,316
	7	.176	4.470	11/64	.0243	8.26	436	1,211	1,298	1,946
	8	.160	4.064	5/32	.0201	6.82	360	1,462	1,074	1,608
	9	.144	3.657	9/64	.0163	5.53	292	1,808	869	1,303
	10	.128	3.251	1/8	.0129	4.37	231	2,287	687	1,030
	11	.116	2.946	7/64	.0106	3.60	190	2,786	564	845
	12	.104	2.641	1/10	.0085	2.88	152	3,466	454	689
	13	.092	2.336	3/32	.0066	2.25	119	4,428	355	532
	14	.080	2.032	5/64	.0050	1.70	90	5,855	268	402
	15	.072	1.828	..	.0041	1.38	73	7,229	218	326
	16	.064	1.625	1/16	.0032	1.10	58	9,150	172	257
	17	.056	1.422	..	.0025	.83	44	11,952	131	197
	18	.048	1.219	3/64	.0018	.61	32.25	16,267	97	145
	19	.040	1.016	..	.0013	.42	22.5	23,424	67	100
	20	.036	.914	..	.0010	.34	18.25	28,918	55	82
	21	.032	.787	1/32	.0008	.273	14.425	36,603	43	64
	22	.028	..	..	.0006	.209	11.046	47,799	33	49
	23	.02400045	.154	8.115	65,062	24	36
	24	.02200038	.129	6.818	77,440	20.5	31
	25	.02000031	.107	5.636	93,683	16.9	25

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WIRE—Cont'd

MARKET WIRES

for
GENERAL MANUFACTURING AND
MERCHANT USE

Annealed Wire
Baling and Binding Wire
Barbed Wire
Basket Hook Wire
Bookbinders' Wire
Bright Hard Wire
Broom and Whisk Wire
Button Wire
Chain Wire
Clothes Line Wire
Coiled Spring Wire
Cut and Straightened Wire
Fencing Wire
Flat Wire
Florists' Wire
Hay Baling Wire
Mattress Wire
Nail Wire
Netting Wire
Oil Tempered Spring Wire
Pail Bail Wire
Spring Wire
Stitching Wire
Stove Pipe Wire
Telephone and Telegraph Wire
Tinman's Wire
Twisted Wire
Welding Wire
Whisk Wire

BRASS WIRE

Soft and Hard or Spring Temper
Snare Wire

COPPER WIRE

Annealed or Soft
Piano
Stranded Cable

WIRES

for
SPECIAL PURPOSES

Armature Binding Wire
Armour Wire
Bead or Braid Wire
Bed Link Wire
Bicycle Spoke Wire
Bolt and Rivet Wire
Bottling Wire
Buckle Wire
Clothes Pin Spring Wire
Cotter Pin Spring Wire
Hair Pin Wire
Hat Wire
Homo Steel Rods
Hook and Eye Wire
Mattress Wire (Stranded)
Mat Wire
Paper Clip Wire
Piano Covering Wire
Pin Wire
Pumprod
Ramrod Steel
Reed Wire
Rivet Wire
Screw Wire
Shoe Nail Wire
Signal Wire
Spooled Wire
Stapling Wire
Stranded Mattress Wire
Stranded Steel Wire
Tag Wire
Tire Wire
Weaving Wire

DRAWN SPECIAL SHAPE STOCK

Square	Half Round
Oval	Grooved
Half Oval	Triangular
Convex	Concave

Made specially when ordered in sufficient quantity.

NAIL WIRE

Soft or Hard
Round
Square
Oval
Triangular
Grooved



WIRE—Cont'd

ANNEALED WIRE

Any quality of wire can be supplied annealed. The annealing is accomplished by heating the wire in closed iron pots which renders it soft and pliable, or by drawing it through molten lead. Several different grades of annealed wire are described in this section of the catalogue. These are adapted for special purposes, and we can supply any grade desired on receipt of information as to the requirements.

ARMOUR WIRE

Made to specification. Prices on application. See also Flat Wire.

BALING AND BINDING WIRE

Annealed Hay Baling Wire is furnished plain, in coils weighing about 50 pounds. Also plain, in cut lengths 16 feet, in bundles of 100 pounds.

BASKET HOOK WIRE

Used in making fruit basket hooks for fastening basket cover. Supplied in tinned finish.

BEAD OR BRAID WIRE

This is a special grade high carbon wire supplied in fine sizes. Usually supplied in Coppered or Tinned finish.

BED LINK WIRE

Bed link wire is of special quality suitable for links used in the manufacture of link mattresses. We supply this grade of wire both round and flat and in different finishes such as bright, coppered, tinned and galvanized.

BICYCLE SPOKE WIRE

A high carbon stock, suitable for heading and threading; drawn within close limits and supplied in smooth liquor bright finish for nickel plating.

BOLT AND RIVET WIRE

Bright, annealed, cleaned and limed. In catch weight coils of 150 or 300 pounds. Made to any gauge desired. Sizes should be given where possible in decimals of an inch.



BARBED WIRE

Galvanized



80 rod reels

1 rod equals 16½ feet



4 x 6

Four point, regular barbed cattle fencing wire. Barbs spaced 6 inches are wrapped around both strands, No. 12½ gauge line wires, No. 14 gauge barbs. Weights per mile 328 pounds, or 16 feet weight one pound.



4 x 4

Hog Fencing, four point barbs thickset. Barbs spaced 4 inches are wrapped around both strands. No. 12½ gauge line wires, No. 14 gauge barbs. Weight per mile 364 pounds, or 14½ feet weigh one pound.



2 x 5

Two point cattle fencing, barbs spaced 5 inches. No. 12½ gauge line wires, No. 14 gauge barbs. Weight per mile 284 pounds, or 18½ feet weigh one pound.

The measurements given are approximate only. We do not guarantee any particular length to a given weight.

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WIRE—Cont'd

BOOK BINDERS' WIRE



Tinned Bookbinders' wire or stitching wire is made both round and flat in any gauge:
Standard sizes are:—

Round Wire	Flat Wire	
A.S. & W. Gauges	A.S. & W. Gauges	
18 to 30	18 x 20	20 x 24
	19 x 21	20 x 25
	19 x 21½	21 x 25
	20 x 23	22 x 26

Wound on spools containing 5 pounds—20 spools in a case. Also in compact coils of 5 or 10 pounds to fit collapsible spools.

BOTTLING WIRE

A soft wire usually supplied with tinned finish and in cut lengths.

BRIGHT HARD WIRE

This is the regular market wire grade in the same condition in which it leaves the last hole in the drawing plate, without further treatment. It has a moderate amount of stiffness, and is the grade of wire generally used in the manufacture of tinware, and for many other purposes, and is sometimes known as Tinman's Wire. Made in all gauges and put up in catch weight coils weighing 50 to 70 pounds.

BROOM AND WHISK WIRE

A tough, strong and heavily tinned wire put up in coils about 8 inches diameter, weighing from 10 to 30 pounds. S.W.G. 17 to 22. Packed in barrels of about 500 pounds.

BUCKLE WIRE

Furnished in all sizes. Quality and finish specially suitable for the purpose.

BUTTON WIRE

Furnished in all sizes. Quality and finish specially suitable for the purpose.

CHAIN WIRE

Chain Wire of a special quality is supplied for the manufacture of Chain, either by forming or by the electric welding process. It is produced as required, in Bright Drawn, Oil Drawn, Annealed Cleaned and Limed, and Galvanized, in catch weight coils of 150 or 300 pounds.

CLOTHES PIN SPRING WIRE

Special wire smoothly galvanized for making clothes pin springs.

CLOTHES LINE WIRE



Standard size is made of 6 strands 19 gauge wire, coated by an improved method with pure zinc and properly stranded, giving a finished clothes line with a smooth bright surface. Put up in 50 foot lengths connected (twelve lengths to a bundle), each 50 foot length tied securely and tagged, which enables the dealer to sell any length from 50 to 600 feet by carrying one stock only. Also supplied in 100, 150 and 200 foot lengths and on reels of any desired length.

WIRE—Cont'd

COILED SPRING WIRE

(Galvanized)



Open hearth, high carbon, coiled spring steel wire for use in building woven wire fences in the field. Sizes S.W.G. No. 9, 12 and 13. In catch weight coils of 140 to 160 pounds, or split bundles 60 to 80 pounds.

COTTER PIN SPRING WIRE

Half Round Cotter Pin Wire supplied in gauges No. 00000 down to No. 11, correctly tempered for the manufacture of Spring Cotters.

CUT AND STRAIGHTENED WIRE

All sizes of Bright, Annealed, Coppered, Liquor Bright, Tinned and Galvanized wires are supplied in cut and straightened lengths as specified.

FENCING WIRE

Hard drawn open hearth steel wire, for fencing purposes. Heavily galvanized. S.W.G. No. 9 and 12 generally used, in catch weight coils of 50 to 70 pounds.

FENCING WIRE

(Plain Twisted)



Plain twisted galvanized wire, two wires No. 12 gauge; weight per mile 288 pounds, or 18½ feet weigh one pound.

The measurements given are approximate only and are not guaranteed. We sell plain twisted wire by weight only and do not guarantee any particular length to a given weight.

FLAT WIRE

We can supply flat wires from ⅛" x ⅛" up to ½" wide, of various widths and thicknesses; in Bright, Tinned, Coppered or Galvanized finishes. See also Bookbinders' Wire, Stapling Wire and Stitching Wire.



FLORISTS' WIRE

This wire is prepared especially for florists' use. It is black or tinned, extra soft, straightened and cut in lengths ready for immediate use. Packed in convenient form, 12 pounds in a wooden box. Sizes: S.W.G. No. 18 to 26 and A.S. and W. Gauge 27 to 36 in lengths 6, 9, 12, 15 and 18 inches.

Florists' Wire is also furnished in coils about 8 inches diameter and weighing 10 to 30 pounds, and on spools containing 5 pounds.

HAIR PIN WIRE

Furnished in all sizes. Quality and finish specially suitable for the purpose.

HAT WIRE

Furnished in regular hat wire sizes. Quality and finish specially suitable for the purpose.

HAY BALING WIRE

See Baling and Binding Wire.

HOMO STEEL RODS

These are heavy drawn wires, supplied bright, straightened and cut to length. They are cut in lengths of 12 feet, and put up in catch weight bundles of about 100 pounds. Also supplied annealed if requested.

Sizes:—⅜, ¼, ⅓, ⅕, ⅙, ⅛ inch.

HOOK AND EYE WIRE

Furnished in all sizes. Quality and finish specially suitable for the purpose.

MATTRESS WIRE

Mattress Wire is correctly tempered, heavily tinned; galvanized or coppered. Put up in coils 8 inches in diameter and packed in paper lined barrels of about 550 pounds. The size generally used is S.W.G. No. 22.

MATTRESS WIRE

Stranded

Stranded 8 strands x 22 gauge or 7 strands x 22 gauge for cable type of construction. Coppered, Tinned or Galvanized.

MAT WIRE

Galvanized wire supplied hard or medium hard for the manufacture of pulp mats.

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WIRE—Cont'd

NAIL WIRE

Soft or Hard, Round, Square, Oval, Triangular or Grooved. Our Hard Nail Wire will be found much stiffer and stronger than the majority of nail wires and consequently makes a better nail for either soft or hard wood.

The soft quality nail wire is particularly suitable for the manufacture of nails with large heads, such as roofing, slate and lath nails and other specials.

NETTING WIRE

Annealed or galvanized annealed wire, for weaving and general purposes. Put up in catch weight coils 50 to 70 pounds, all gauges.

OIL TEMPERED SPRING WIRE

Our range of sizes is from .125" diameter to .500" diameter. Smaller diameters will be considered also.

PAIL BAIL WIRE

We supply a special wire of the right temper, bright, coppered, tinned or galvanized, in coils or cut to exact lengths. Price on application.

PAPER CLIP WIRE

For the manufacture of paper clips in many different sizes and styles. It is usually supplied in tinned finish.

PIANO COVERING WIRE

Steel Wire, heavily tinned or coppered, used for coiling around steel piano strings. Made in S.W.G. No. 14 to 26; A.S.&W. 27 to 33 gauge. Sizes, No. 14 to 23 put up in coils 8 inches diameter and weighing 10 to 30 pounds. Sizes, No. 20 to 33 put up on spools holding 10 pounds.

See also Copper Piano Covering Wire.

PIN WIRE

Pin Wire is put up in coils 8 inches diameter and packed in barrels lined with damp proof paper holding about 550 pounds. The sizes used are Pin Wire Gauge No. 1, 2, 3, 4 and 5, or .0375, .033, .032, .030 and .0285 inch respectively.

PUMP RODS

Smooth Drawn stock furnished in diameters of $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, and $\frac{1}{2}$ inch, bright or galvanized. Put up in catch weight bundles of about 100 pounds, 20 foot lengths.

RAMROD STEEL

We supply a smooth drawn high carbon steel, drawn to exact decimal, and accurately straightened. Can be furnished coppered if desired.

REED WIRE

Furnished in various sizes. Quality and finish specially for the purpose.

RIVET WIRE

See Bolt and Rivet Wire.

SCREW WIRE

Mild drawn in coils or straight lengths, for thread rolling or thread cutting and automatic work.

**SHOE RIVET WIRE**

This is a soft drawn wire specially suitable for the forming of the heads and points on these Rivets, and to permit of their clinching properly.

SIGNAL WIRE

A high carbon wire of great strength, galvanized to stand four immersion tests, generally called for in Nos. 8 and 9 gauges. Put up in catch weight coils of 60 inches diameter.

SPOOLED WIRE

For some purposes it is more convenient and less wasteful to have wire spooled than in coils. We can supply wire on spools in No. 18 to 36 and in weights 5 to 10 pounds.

SPRING WIRE

We furnish this in different grades, for the manufacture of spiral, helical and all other classes of springs. It is supplied in all gauges. Inquiry should state clearly the amount of temper required in the wire, and if possible should be accompanied by a sample piece of not less than 15 inches. Produced in Bright, Coppered, Tinned or Galvanized finish.

STAPLING WIRE

Stapling Wire is furnished both Round and Flat, and the grade of material is such that it permits the use of this wire in automatic machines which form and drive the staples at high speed.

STITCHING WIRE

Stitching Wire, supplied on spools and also in small compact coils, is used for a variety of purposes, such as the manufacture of fruit baskets, novelties, calendar pads, general book-binding and box stitching, and new uses are steadily developing. See also bookbinders' wire.

STOVE PIPE WIRE

Stove Pipe Wire is made in S.W.G. No. 18 and 19, and is put up in hanks or coils weighing $\frac{1}{4}$ pound which are put up in 10 pound bundles.

LACQUER COATED ANNEALED

Arranged for counter display. Each carton contains 12 coils each 50 feet in length, the same as in usual hanks but coiled in more compact form. The black lacquer coating prevents rust and gives the wire a clean, finished appearance. Coils measure approximately 2" inside diameter each weighing 4 oz.—packed 6 cartons to a case. Stelco Lacquer Coated Stove Pipe Wire has earned a place with the Auto Accessory Display. Every motorist requires a coil of wire to meet a quick repair in an emergency.

WIRE—Cont'd

STRANDED MATTRESS WIRE

See Mattress Wire.

STRANDED STEEL WIRE

Seven wires twisted into one strand.
Galvanized and Extra Galvanized.



Used for signal and semaphore wires, guy wires on steel stacks and transmission towers, telegraph and telephone lines, suspending trolley wires, messenger strand for telephone and telegraph cables and many other purposes.

Three grades are made, of different breaking strains: Soft, Hard, and Crucible.

The galvanizing is smooth and can be supplied in the regular quality of galvanizing (sometimes referred to as 2 dip) or extra galvanized to withstand the standard four one-minute immersion test. Prices on application.

Approximate Weight and Breaking Strain.

Diam. Finished Strand in Inches	Gauge of Wires Com- posing Strand	Weight per 1000 feet in Pounds	Breaking Strain		
			Soft	Hard	Crucible
1/2	7 1/2	570	9,000	11,000	21,000
7/16	9	415	7,000	9,200	18,000
3/8	10	320	5,600	7,500	14,600
5/16	12	210	3,800	5,300	10,000
9/32	13	174	3,000	4,300	8,100
1/4	14	120	2,300	3,400	5,700
3/16	16	80	1,400	2,300	4,200

In ordering give size, grade, Soft, Hard or Crucible, and galvanizing required, supplied in coils or on reels.

TAG WIRE

Bright, Tinned or Annealed Steel Wire, is furnished in coils about 8 inches diameter, weighing 10 to 30 pounds, or in bundles of 1,000 pieces, straightened and cut to length. Made in any gauge and length required.



TELEPHONE AND TELEGRAPH WIRE

We manufacture various grades of wire to conform to C.E.S.A. and other standard specifications for telegraph and Telephone work. Orders, or enquiries for prices, should state the constant required, the quality of galvanizing, gauge, style and weight of bundles and other conditions to which the wire must conform.

Galvanizing of a quality to withstand the four one-minute immersion test is standard. Trials of our wire have repeatedly shown that it is more heavily galvanized than this severe test requires.

Our regular wire is made of the following classes:—

Constant5600
"5000

Recognized standard weights per mile:—

B.W.G.	Decimal	Weight per mile in Lbs.
4	.238	790
6	.203	570
8	.165	385
9	.148	320
12	.109	165

Ohms resistance per mile may be calculated by dividing the constant number by weight per mile of wire, the lower constant numbers representing wires of higher conductivity.

TINMAN'S WIRE

See Bright Hard Wire.

TIRE WIRE

For use in solid rubber carriage tires. Made bright or coppered in either regular hard drawn or spring qualities. Cut to specified lengths in any gauge desired. See also Bead or Braid wire.

TWISTED WIRE



This material is used for binding boxes. It is manufactured from 15 gauge galvanized wiped wire and is composed of two strands which are twisted very tightly. Wound on reels containing approximately 100 pounds.

WEAVING WIRE

Annealed Galvanized Wire for weaving and general purposes. Put up in catch weight coils. All gauges.

WELDING WIRE

Galvanized Basic Welding Wire for making Electric Welded Hoops and Broom Bands.

Bright, coppered or coated Welding Wire in coils or cut for Oxy-acetylene and Electric Welding purposes.

WHISK WIRE

See Broom and Whisk Wire.

WIRE—Cont'd

BRASS WIRE

Soft and hard or spring temper supplied in all gauges. Regularly put up in catchweight coils or coils of 1, 5 and 10 pounds, wrapped in paper.

SNARE WIRE

Soft Brass Snare Wire, S.W.G. Nos. 21, 23 and 24. Put up in one and two ounce coils, five pounds in a bundle.

WEIGHT OF BRASS WIRE

Imperial Gauge Number	Decimal Equivalent in Inches	Weight per 1000 feet
00	.348	.....
0	.324	302.0
1	.300	257.0
2	.276	217.5
3	.252	181.4
4	.232	153.7
5	.212	128.2
6	.192	105.5
7	.176	88.4
8	.160	73.0
9	.144	59.9
10	.128	47.57
11	.116	38.52
12	.104	30.80
13	.092	24.00
14	.080	18.67
15	.072	14.76
16	.064	11.74
17	.056	8.90
18	.048	6.52
19	.040	4.50
20	.036	3.70
21	.032	2.92
22	.028	2.23
23	.024	1.55
24	.022	1.38
25	.020	1.154
26	.018	.8694
27	.0164	.7159
28	.0149	.5870
29	.0136	.4964
30	.0124	.4128
31	.0116	.3848
32	.0108	.3343
33	.010	.2860
34	.0092	.2420
35	.0084	.2018
36	.0076	.1651

ANNEALED OR SOFT COPPER WIRE

Supplied in all gauges. Regularly put up in catchweight coils or coils of 1, 5 and 10 pounds, wrapped in paper. Drawn from pure copper mined and refined in Canada.

COPPER PIANO COVERING WIRE

Copper Wire for covering steel piano strings is made of medium temper, pure copper, highly polished, and perfectly free from dirt or grease. Sizes S.W.G. Gauge Nos. 16, 17, 17½, 18, 18½, 19, 19½, 20, 21, 22, 23, 24, 25, 26, 27, and 28. Put up in catchweight coils of 10 to 30 pounds, 8 inches in diameter. The finer sizes will be supplied, when desired, on spools containing 5 pounds.

See also Piano Covering Wire.

STRANDED COPPER CABLE



Seven strand sizes 3/16" up to 1/2" diameter. Supplied in coils or on reels as specified. Stranded copper cable is formed by grouping six wires around a central wire, thereby forming a seven wire cable.

TENSILE STRENGTH OF PURE COPPER WIRE

Size B. & S. Gauge No.	Hard Drawn		Annealed	
	Actual in Lbs.	Average per sq. in. in Lbs.	Actual in Lbs.	Average per sq. in. in Lbs.
0000	8,260	49,700	5,320	32,000
000	6,550	49,700	4,220	32,000
00	5,440	52,000	3,340	32,000
0	4,530	54,600	2,625	32,000
1	3,680	56,000	2,100	32,000
2	2,970	57,000	1,670	32,000
3	2,380	57,600	1,323	32,000
4	1,900	58,000	1,050	32,000
5	1,580	60,800	884	34,000
6	1,300	63,000	700	34,000
7	1,050	64,200	556	34,000
8	843	65,000	441	34,000
9	678	66,000	350	34,000
10	546	67,000	277	34,000
12	343	67,000	174	34,000
14	219	68,000	110	34,000
16	138	68,000	68.9	34,000
18	86.7	68,000	43.4	34,000
19	68.8	68,000	34.4	34,000
20	54.7	68,000	27.3	34,000



WIRE—Cont'd

WEIGHT OF COPPER WIRE

Per 1,000 Feet and per Mile in Pounds

No. of Wire Gauge	Imperial Standard			Brown and Sharpe			Birmingham			No. of Wire Gauge
	Diameter in Inches	Weight		Diameter in Inches	Weight		Diameter in inches	Weight		
		per 1000 feet	per mile		per 1000 feet	per mile		per 1000 feet	per mile	
6-0	.464	652	3,441	.....	.....	.....	.....	.....	.....	6-0
5-0	.432	565	2,983	.....	.....	.....	.....	.....	.....	5-0
4-0	.400	484	2,557	.46	641	3,382	.454	624	3,294	4-0
3-0	.372	419	2,212	.40964	509	2,687	.425	547	2,887	3-0
2-0	.348	367	1,935	.3648	403	2,129	.380	437	2,308	2-0
0	.324	318	1,678	.32486	320	1,688	.340	350	1,847	0
1	.300	272	1,438	.2893	253	1,335	.300	272	1,438	1
2	.276	231	1,217	.25763	202	1,064	.284	244	1,289	2
3	.252	192	1,015	.22942	159	838	.259	203	1,072	3
4	.232	163	860	.20431	126	665	.238	171	905	4
5	.212	136	718	.18194	100	529	.22	146	773	5
6	.192	112	589	.16202	79	419	.203	125	659	6
7	.176	94	495	.14428	63	331	.180	98	518	7
8	.160	77	409	.12849	50	262	.165	82	435	8
9	.144	63	331	.11443	39	208	.148	66	350	9
10	.128	50	262	.10189	32	166	.134	54	287	10
11	.116	41	215	.09074	25	132	.120	44	230	11
12	.104	33	173	.08080	20	105	.109	36	190	12
13	.092	25.6	135	.07196	15.7	83	.095	27.3	144	13
14	.080	19.4	102	.06408	12.4	65	.083	20.8	110	14
15	.072	15.7	83	.05706	9.8	52	.072	15.7	83	15
16	.064	12.4	65	.05082	7.9	42	.065	12.8	68	16
17	.056	9.5	50	.04525	6.1	32	.058	10.2	54	17
18	.048	7.0	36.8	.04030	4.8	25.6	.049	7.3	38.4	18
19	.040	4.8	25.6	.03589	3.9	20.7	.042	5.3	28.2	19
20	.036	3.9	20.7	.03196	3.1	16.4	.035	3.7	19.6	20
21	.032	3.1	16.4	.02846	2.5	13.0	.032	3.1	16.4	21
22	.028	2.4	12.5	.02534	1.9	10.2	.028	2.4	12.5	22
23	.024	1.7	9.2	.02257	1.5	8.2	.025	1.9	10.0	23
24	.022	1.5	7.7	.0201	1.2	6.5	.022	1.5	7.7	24
25	.020	1.2	6.4	.0179	.97	5.1	.020	1.2	6.4	25
26	.018	.98	5.2	.01594	.77	4.0	.018	.98	5.2	26
27	.0164	.81	4.3	.01419	.61	3.2	.016	.77	4.1	27
28	.0148	.66	3.5	.01264	.48	2.5	.014	.59	3.1	28
29	.0136	.56	3.0	.01125	.39	2.0	.013	.51	2.7	29
30	.0124	.47	2.5	.01002	.30	1.6	.012	.44	2.3	30
31	.0116	.41	2.15	.00892	.24	1.27	.010	.30	1.6	31
32	.0108	.35	1.86	.00795	.19	1.02	.009	.25	1.3	32
33	.010	.30	1.60	.00708	.15	.81	.008	.19	1.02	33
34	.0092	.26	1.35	.00630	.12	.63	.007	.15	.78	34
35	.0084	.21	1.13	.00561	.095	.50	.005	.075	.40	35
36	.0076	.17	.92	.005	.076	.40	.004	.048	.256	36

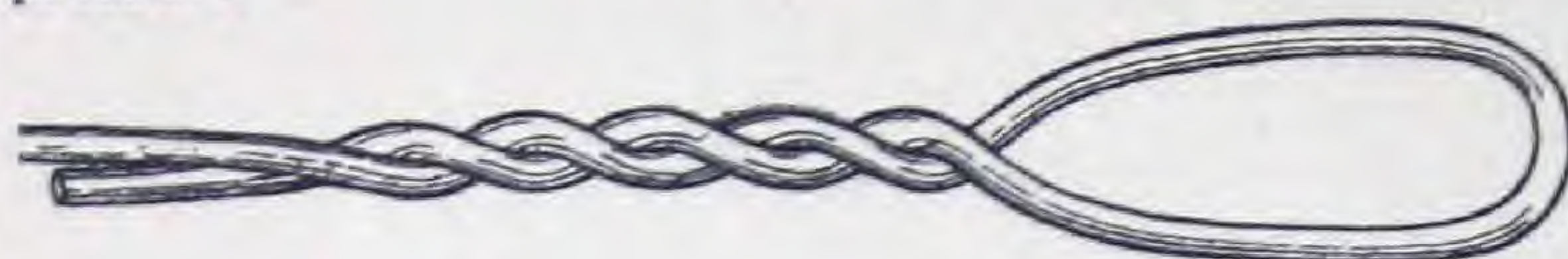
The diameters given for the various sizes are those to which the wire is drawn

17
18
19
20
21
22
23
24
25

WIRE PRODUCTS—Cont'd

SINGLE LOOP WIRE BALE TIES

To ascertain the length of bale tie required, add three inches to the measure around the bale when under pressure.



Made for all baling purposes; from 9 to 16 gauge wire, and from 3 to 15 feet long.

The following are stock sizes, the lengths being measured over all:—

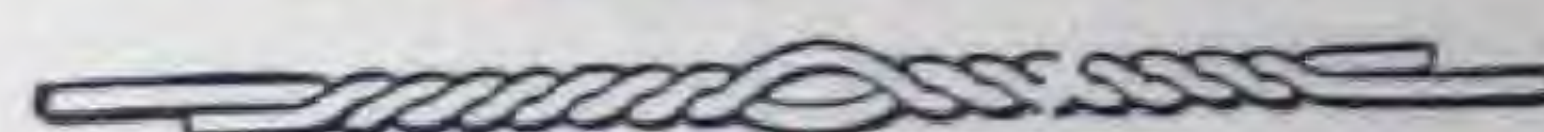
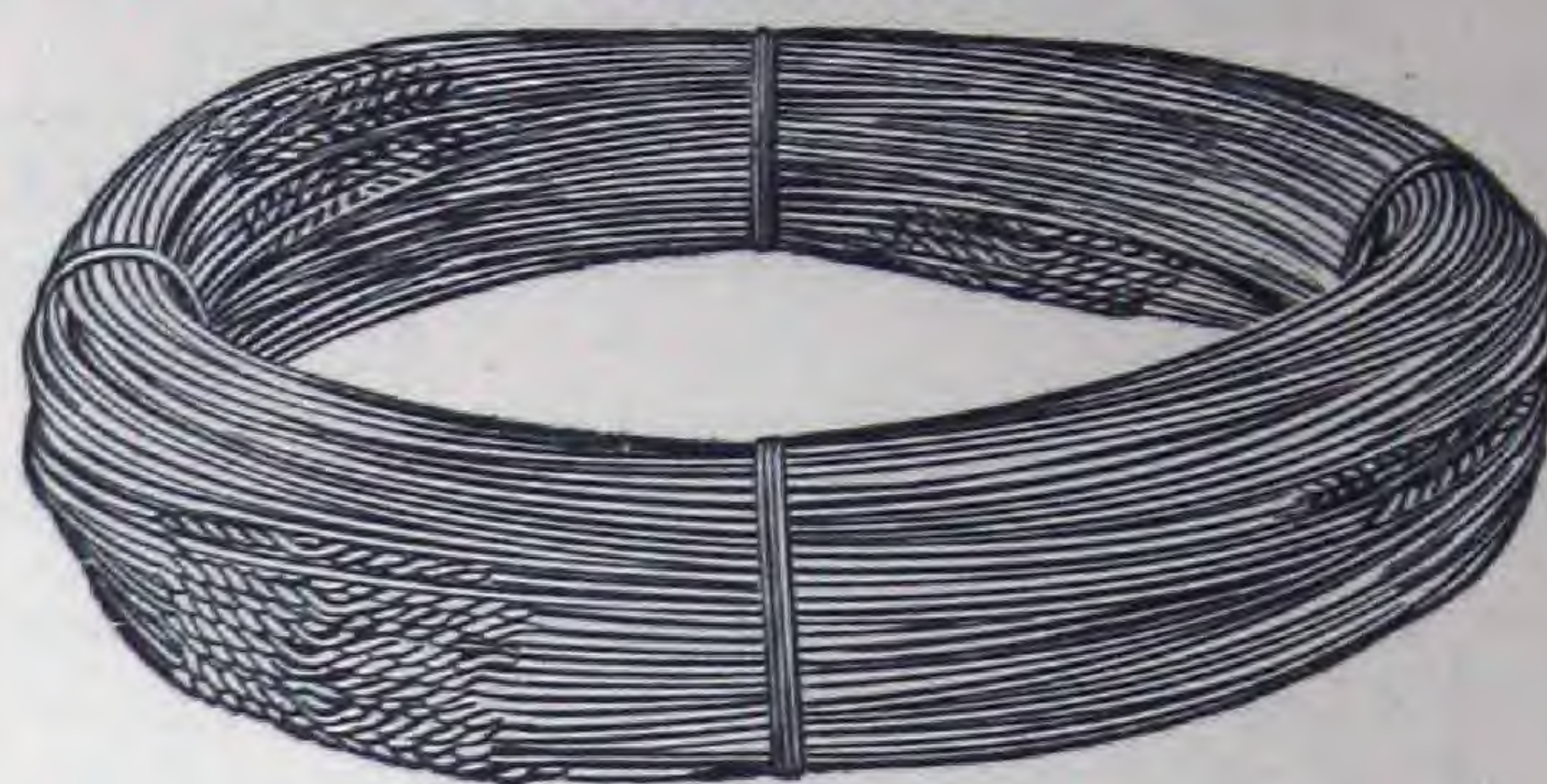
Gauge No.	Length in Feet							
14	9	9 1/4	9 1/2	9 3/4	10	10 1/4	10 1/2	
13	7 1/4	9	9 1/4	9 1/2	9 3/4	10	10 1/4	10 1/2

In bundles of 250 ties wrapped with burlap on both ends. Also supplied in exact weight bundles, if required. For oiling or galvanizing an extra charge will be made. Any size not listed promptly made to order.

APPROXIMATE WEIGHT OF SINGLE LOOP BALE TIES PER BUNDLE OF 250 TIES

Length in feet	No. 12	No. 13	No. 14	No. 15	No. 16
6	47.6	35.8	27.0	21.9	16.4
6 1/4	49.5	37.2	28.1	22.8	17.0
6 1/2	51.3	38.6	29.2	23.6	17.7
6 3/4	53.2	40.0	30.2	24.5	18.3
7	55.1	41.4	31.3	25.4	19.0
7 1/4	56.9	42.8	32.4	26.2	19.6
7 1/2	58.8	44.2	33.4	27.1	20.3
7 3/4	60.6	45.6	34.5	28.0	21.0
8	62.5	47.0	35.6	28.8	21.7
8 1/4	64.3	48.4	36.6	29.7	22.4
8 1/2	66.2	49.8	37.7	30.5	23.0
8 3/4	68.0	51.2	38.8	31.4	23.7
9	69.9	52.6	39.8	32.3	24.3
9 1/4	71.7	54.0	40.9	33.1	25.0
9 1/2	73.6	55.4	42.0	34.0	25.6
9 3/4	75.5	56.8	43.0	34.9	26.3
10	77.3	58.2	44.1	35.7	26.9
10 1/4	79.2	59.6	45.2	36.6	27.6
10 1/2	81.0	60.9	46.2	37.5	28.2
10 3/4	82.9	62.3	47.3	38.3	28.9
11	84.7	63.7	48.4	39.2	29.5
11 1/4	86.6	65.1	49.4	40.0	30.2
11 1/2	88.5	66.5	50.5	40.9	30.8
11 3/4	90.3	67.9	51.6	41.8	31.5
12	92.2	69.3	52.6	42.6	32.1

WIRE HOOPS



Twisted splice hoops are used principally for neck, eighth, quarter and bilge hoops on slack and tight barrels, kegs and woodenware, also as reinforcement for cylindrical concrete work.

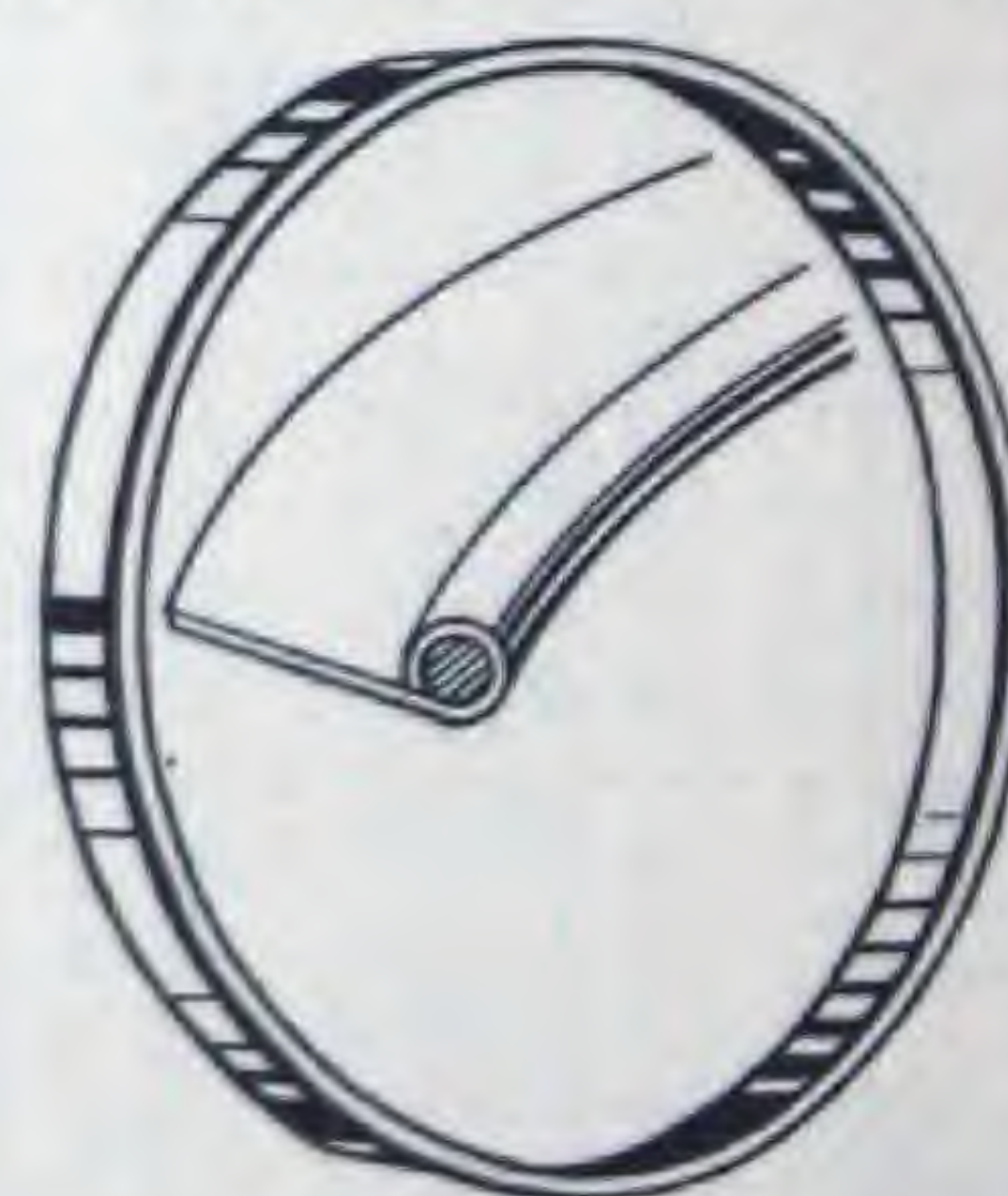
Furnished plain or galvanized as specified, in gauges 10, 11 and 12 and lengths 33" to 68 1/2". (The length is figured as the circumference plus the material required to make the splice.) The length required can be obtained also by passing a steel tape around the barrel at a point three-quarters of an inch nearer the end of the barrel than the position to which the hoop is to be driven.

Samples furnished on request. Shipped in bundles of 250 hoops. Price on application.

Approximate weight per 1,000 hoops can be obtained by using the weights for a 33" length hoop, adding the following constants for each additional inch in length:

Approximate Weights	10 Gauge	11 Gauge	12 Gauge
33" Length	151.9 lbs.	122.7 lbs.	92.8 lbs.
Add per inch	4.1 lbs.	3.2 lbs.	2.5 lbs.

BEADED STEEL HOOPS



For use on kegs and barrels of slack cooperage. Supplied in widths chiefly 1 3/8" and 1 5/8", in gauges Nos. 20, 21, 22 and 23, punched for riveting, and either punched or unpunched for nailing. These hoops can be supplied either nested in rounds, or straight lengths, as desired.

Approximate weight per 1000 hoops can be obtained by using the weights of a 24" length hoop adding the following constants for each additional inch in length:

Approximate Weights.....	1 3/8" x 23ge.	1 5/8" x 23ge.	1 5/8" x 22ge.
24" Length...	233.8 lbs.	276.2 lbs.	309.4 lbs.
Add per inch.	9.7 lbs.	11.5 lbs.	12.9 lbs.
Approximate Weights.....	1 5/8" x 21ge.	1 5/8" x 20ge.	
24" Length...	353.6 lbs.	386.8 lbs.	
Add per inch.	14.8 lbs.	16.1 lbs.	



WIRE PRODUCTS—Cont'd



Warehouse facilities at Canada Works provide inside storage for all fencing and accessories



Invincible



FENCING and GATES

Fence plants for manufacturing Farm and Chain Link Fencing are located at Hamilton, Ontario and Lachine, Quebec. The Hamilton plant started operations in 1930 and at Lachine complete renovations to the existing fence plant took place. Invincible Fencing bears the distinction of being the only wire fencing made in Canada from ore to finished article in the plants and under the control of one manufacturer.

FARM FENCE

"Control of every operation" provides opportunities for setting the standard of quality as will be noted in these three features—higher tensile strength of the wire; copper bearing steel; extra galvanizing.

Another feature is the method of fastening the intersecting wires together. An examination of the Invincible Lock will show these advantages—

Made of the same gauge wire as the intersecting wires.

It is a complete, closely formed circle.

No rust-producing moisture can accumulate.

It is as heavily galvanized as the rest of the fence.

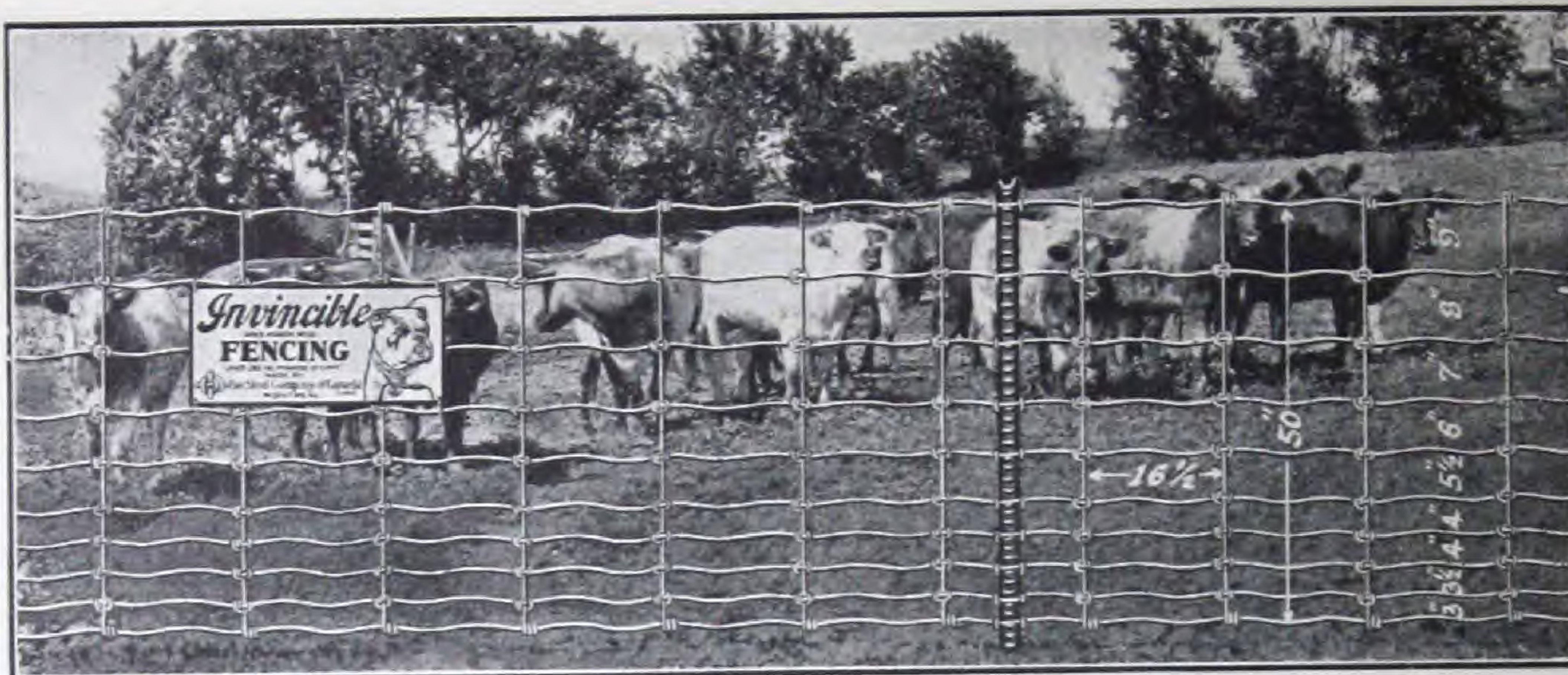
Farm Fence is put up in 20, 30 and 40 rod rolls, Poultry Fencing in 10, 20 and 30 rod rolls. A rod is equal to $16\frac{1}{2}$ lineal feet.

Stocks of all standard styles for prompt shipment are carried at Hamilton, Montreal and Lachine.



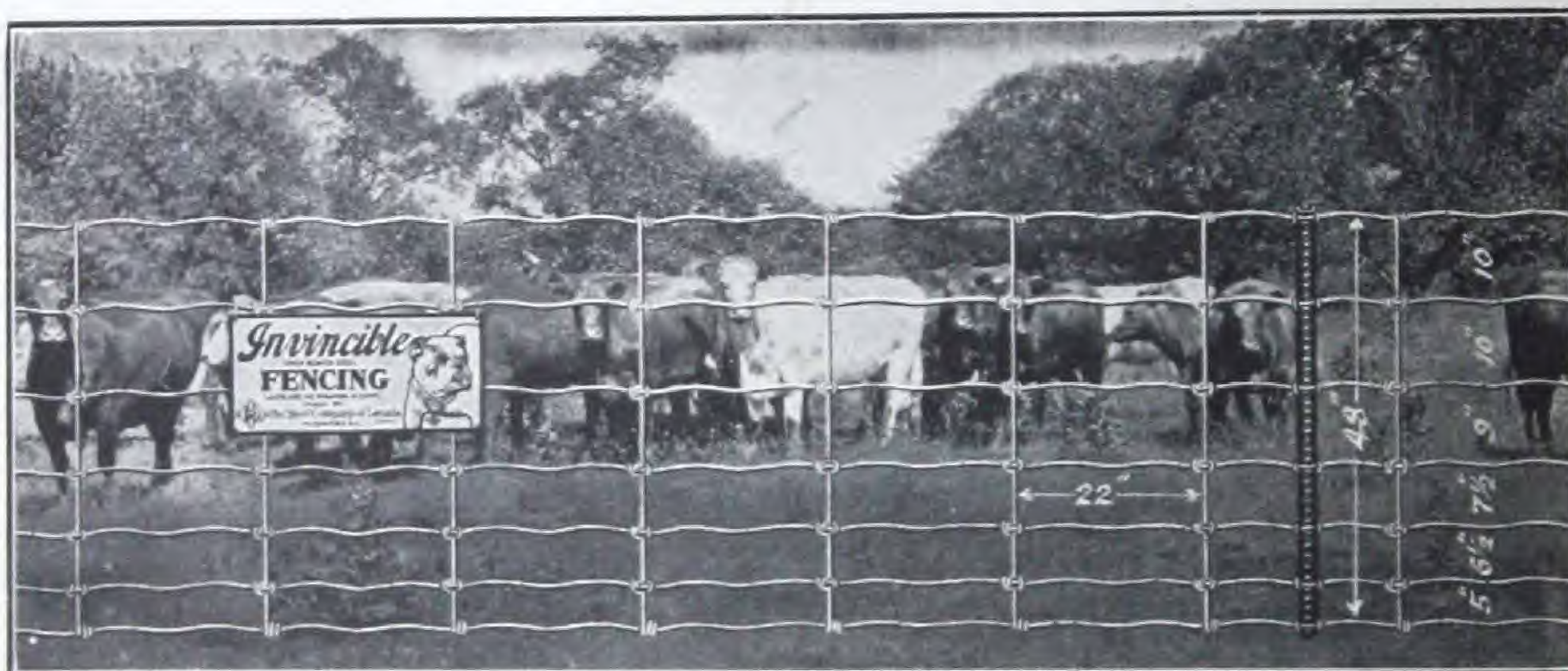
Copy of our Invincible Fence Catalogue will be sent on request.

Invincible Fencing



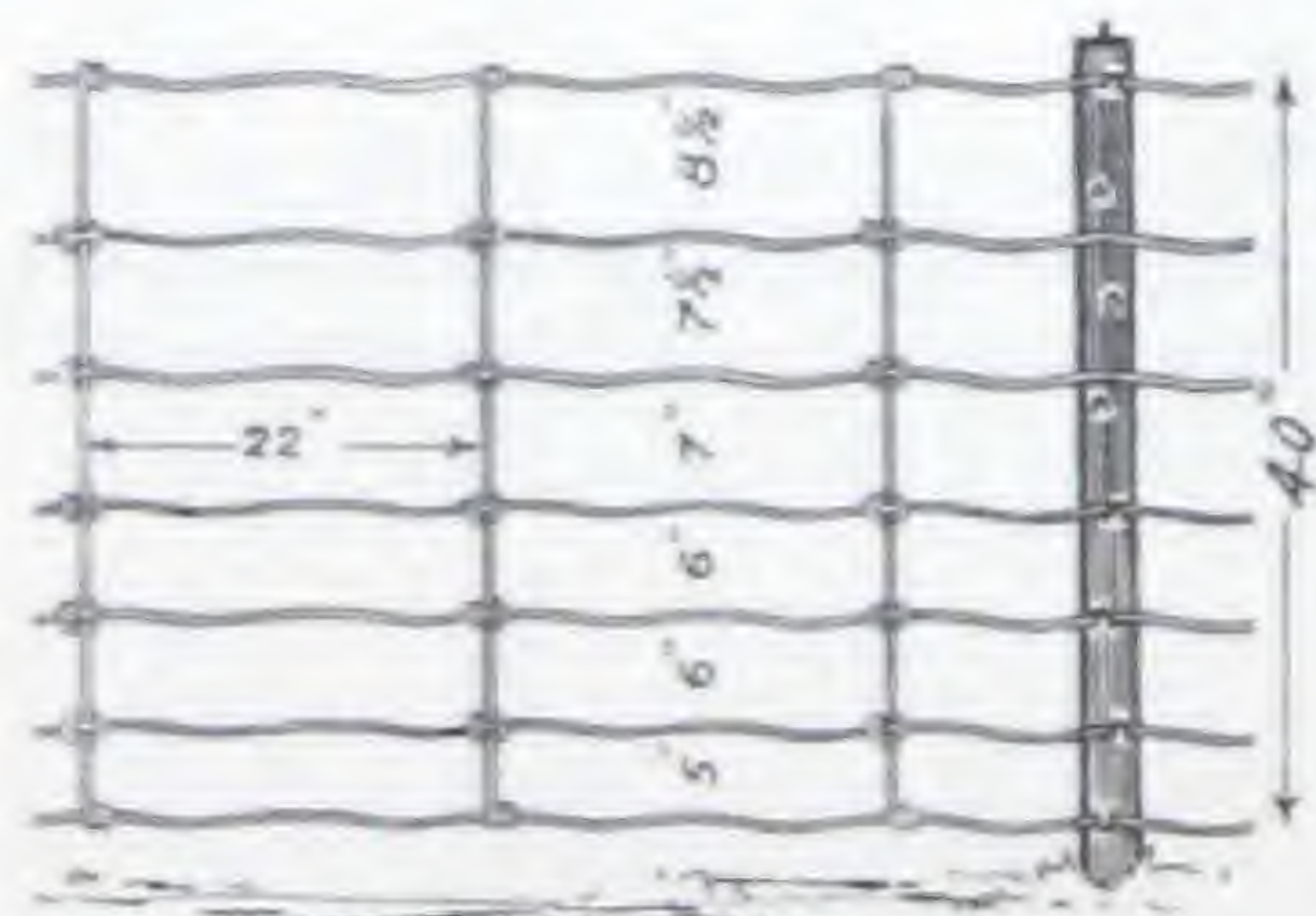
INVINCIBLE FENCING—Style 1048 (Heavy)

10 line wires, 48 inches high, upright wires 16½ inches apart.
Spacing of line wires graduating from the bottom up 3", 3", 4", 5", 5½", 6½", 6½", 7", 7½".



INVINCIBLE FENCING—Style 748-0 (Heavy)

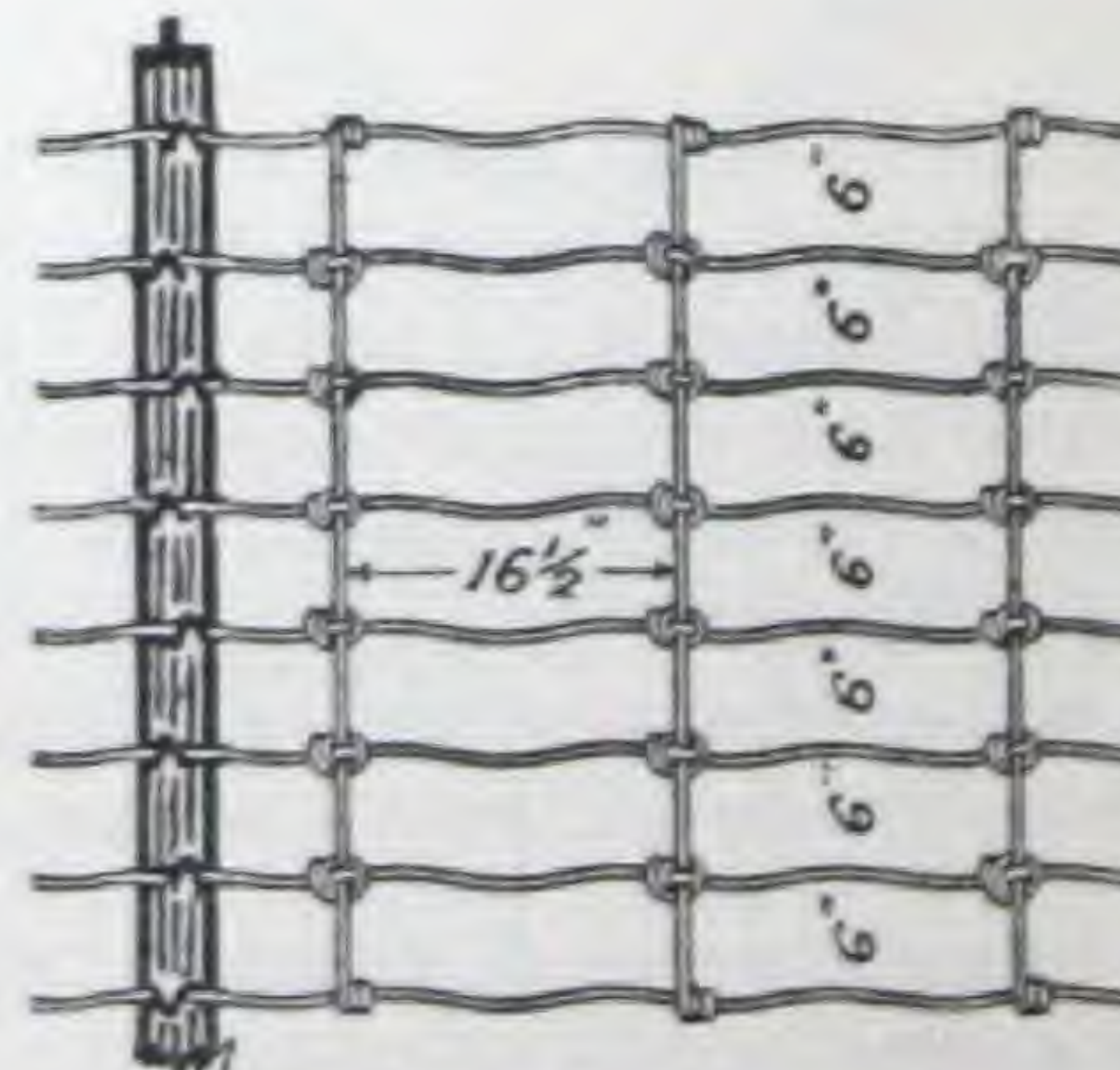
7 line wires, 48 inches high, upright wires 22 inches apart.
Spacing of line wires graduating from the bottom up 5", 6½", 7½", 9", 10", 10".



Style 740-0 (Heavy)

7 line wires, 40 inches high, upright wires 22 inches apart. Spacing of line wires graduating from the bottom up 5", 6", 6", 7", 7½", 8½".

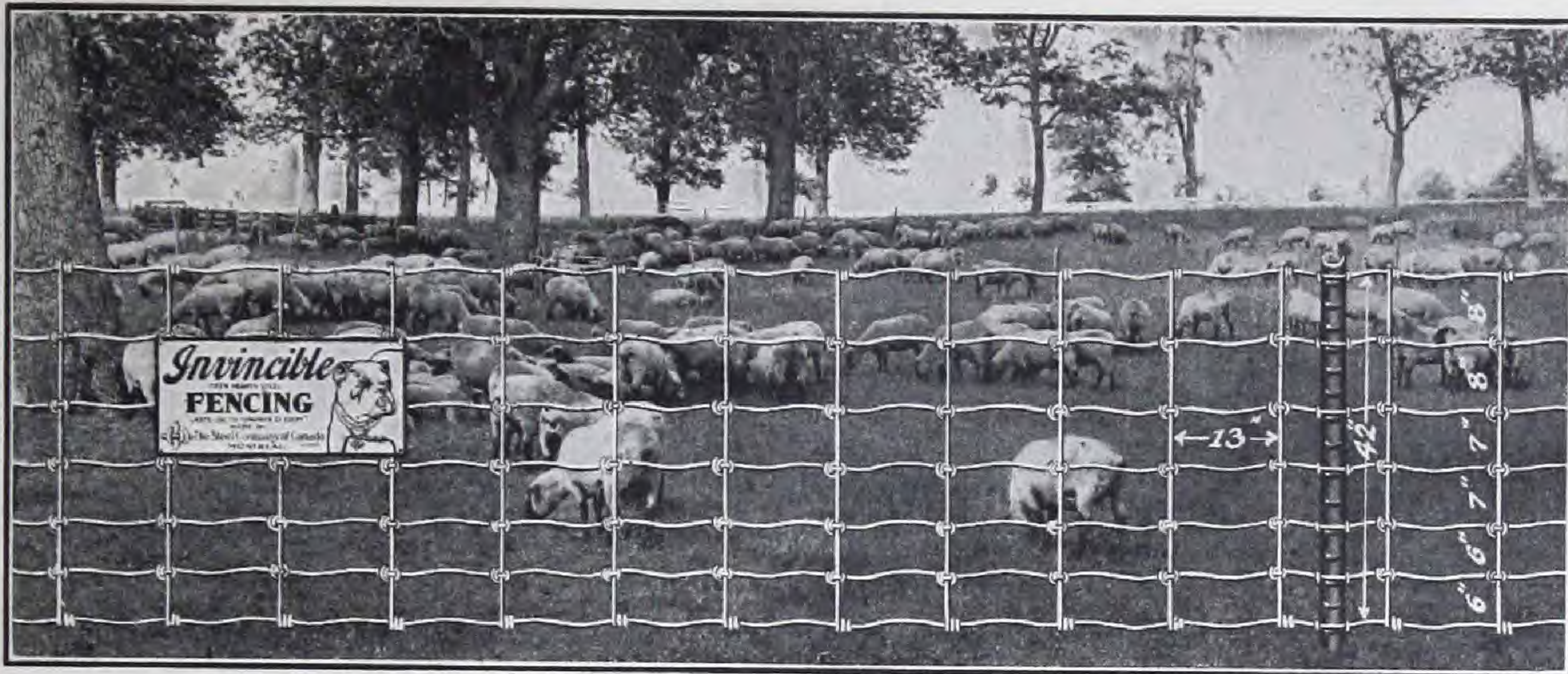
**Copper
Bearing**
WIRE
THROUGHOUT



Style 842 (Heavy)

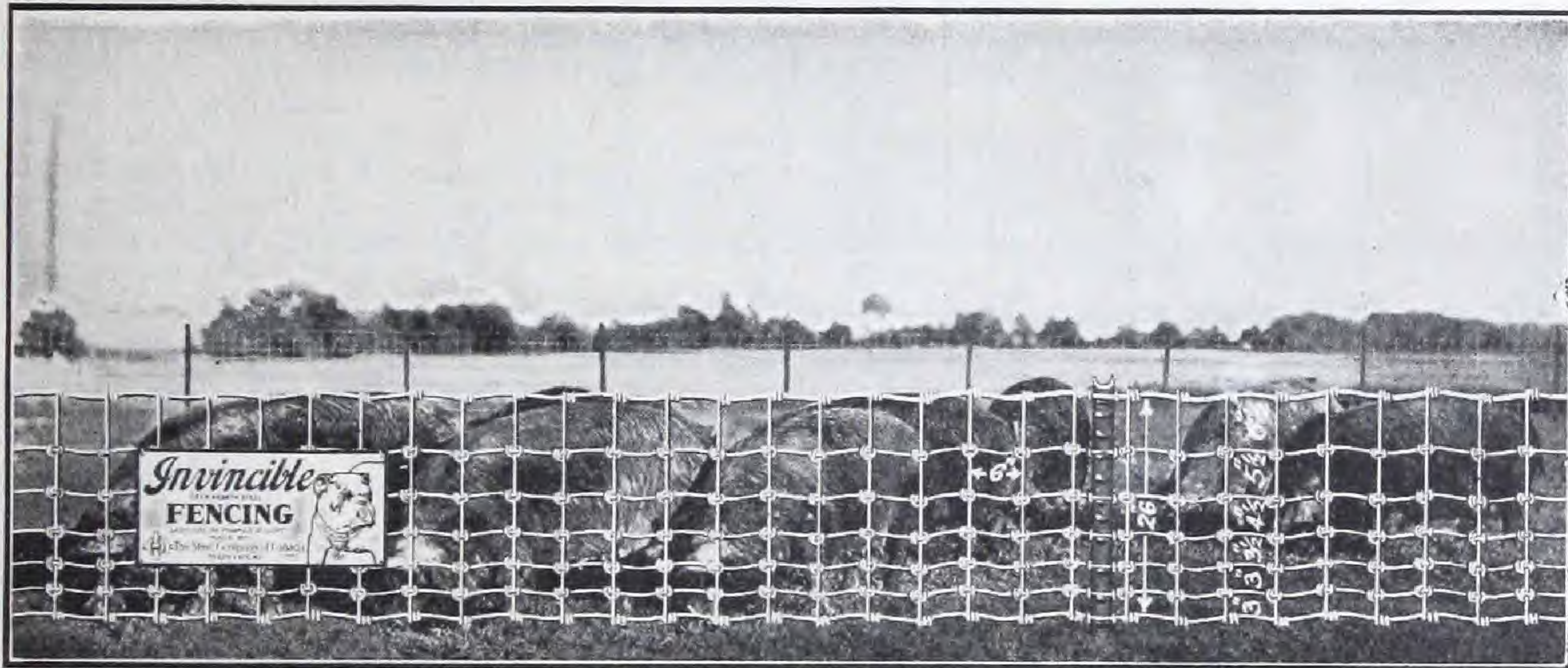
8 line wires, 42 inches high, upright wires 16½ inches apart. Equal spacing between line wires of 6 inches each.

Invincible Fencing



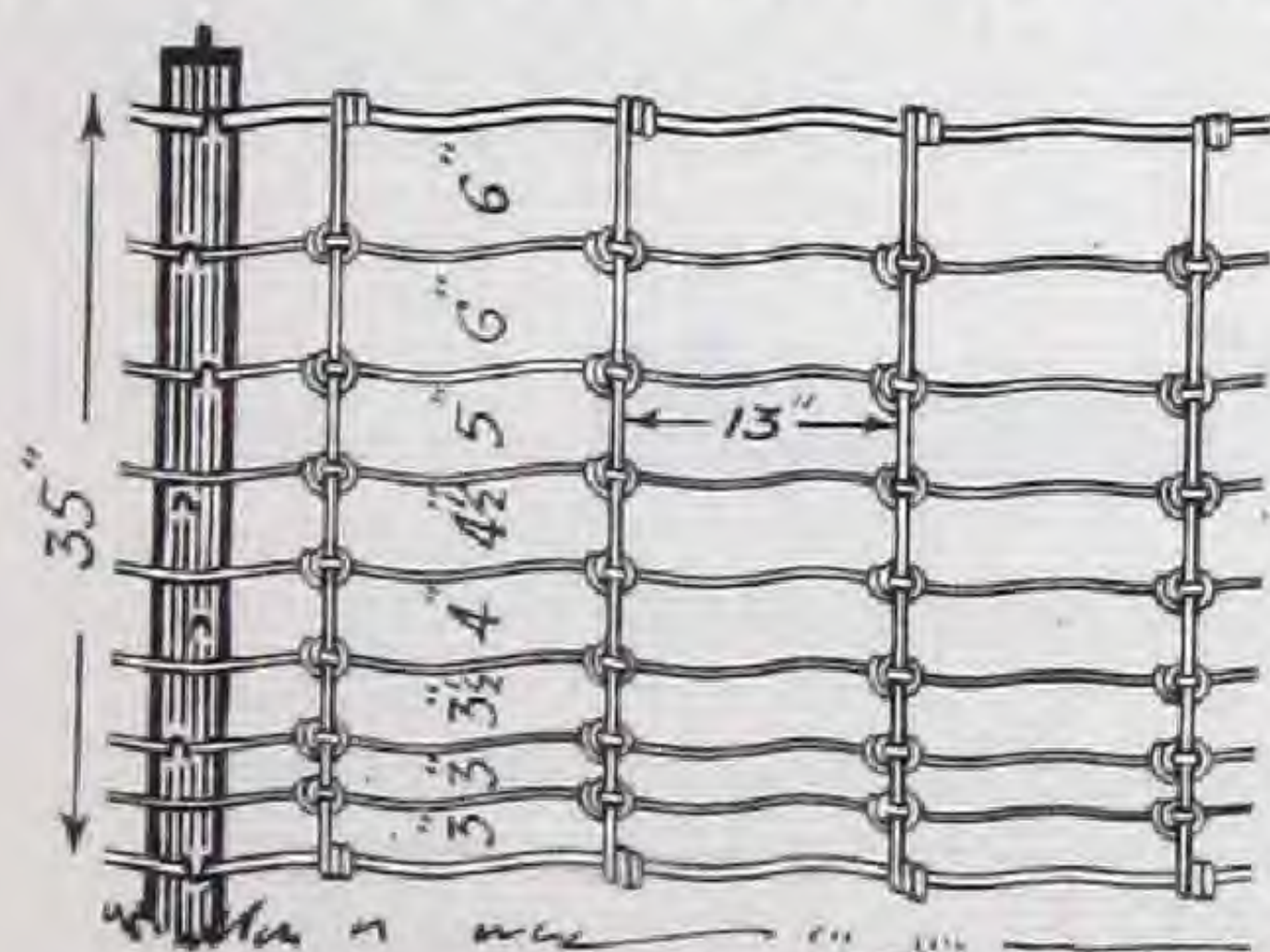
INVINCIBLE FENCING—Style 742 (Medium)

Top and bottom wires No. 9 gauge. Intermediates and stays No. 12 wire. 7 line wires, 42 inches high, upright wires 13 inches apart. Spacing of line wires graduating from the bottom up 6", 6", 7", 7", 8", 8".



INVINCIBLE HOG FENCING—Style 726-1 (Medium)

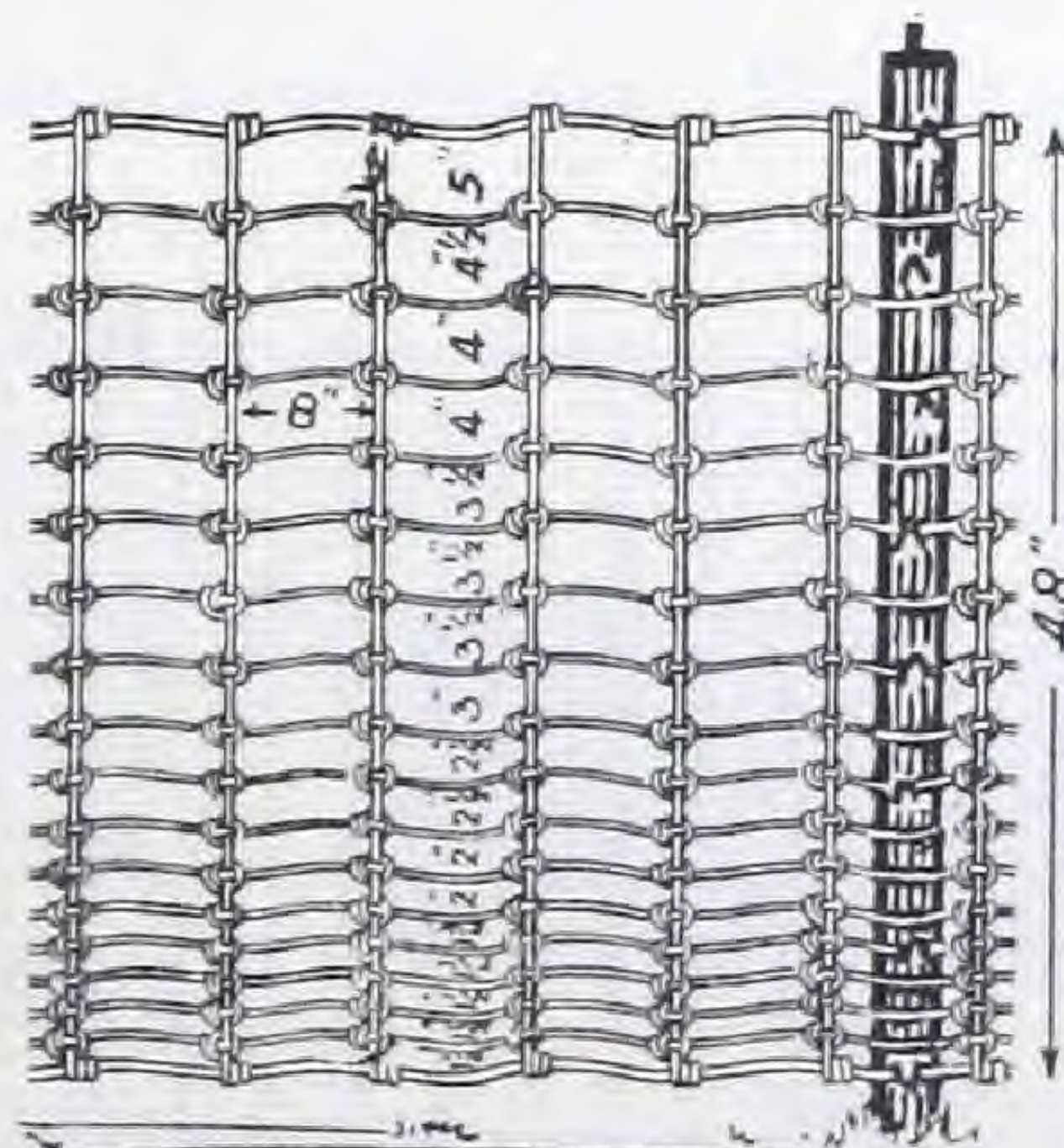
Top and bottom wires standard gauge. Intermediate and stays No. 13 wire. 7 line wires, 26 inches high, upright wires 6 inches apart. Spacing of line wires graduating from the bottom up 3", 3", 3½", 4½", 5½", 6½".



SHEEP FENCING—Style 935 (Medium)

Top and bottom wires, No. 9 gauge. Intermediate and stays No. 12 gauge. 9 line wires, 35 inches high, upright wires 13" apart. Spacing of line wires graduating from the bottom up 3", 3", 3½", 4", 4½", 5", 6", 6".

**Copper
Bearing**
WIRE
THROUGHOUT



POULTRY FENCING—Style 1848

Top and bottom wires No. 9 gauge. Intermediates and stays No. 13 gauge. 18 line wires, 48 inches high, upright wires 8 inches apart. Spacing of line wires graduating from the bottom up 1½", 1½", 1½", 1¾", 1¾", 2", 2", 2½", 2½", 3", 3½", 3½", 3½", 4", 4", 4½", 5".

*Copper
Beating*
WIRE
THROUGHOUT

Invincible Fencing

SUMMARY OF FARM STYLES

Heavy Styles

Style No.	Number of Strands	Height	Distance Between Upright Wires	Spacing of Laterals
433-0	4	33 in.	22 in.	10, 11, 12
540-0	5	40 "	22 "	8, 9, 11, 12
630-0	6	30 "	22 "	5, 5, 6, 7, 7
630	6	30 "	16½ "	5, 5, 6, 7, 7
640-0	6	40 "	22 "	6, 7, 8, 9, 10
740-0	7	40 "	22 "	5, 6, 6, 7, 7½, 8½
740	7	40 "	16½ "	5, 6, 6, 7, 7½, 8½
748-0	7	48 "	22 "	5, 6½, 7½, 9, 10, 10
842-0	8	42 "	22 "	6, 6, 6, 6, 6, 6, 6
842	8	42 "	16½ "	6, 6, 6, 6, 6, 6, 6
847-0	8	47 "	22 "	4, 5, 6, 7, 8, 8, 9
847	8	47 "	16½ "	4, 5, 6, 7, 8, 8, 9
936	9	36 "	16½ "	3, 3, 3½, 4½, 5, 5, 6, 6
948	9	48 "	16½ "	6, 6, 6, 6, 6, 6, 6, 6
950-0	9	50 "	22 "	3, 4, 5, 6, 7, 8, 8, 9
950	9	50 "	16½ "	3, 4, 5, 6, 7, 8, 8, 9
1048	10	48 "	16½ "	3, 3, 4, 5, 5½, 6½, 6½, 7, 7½

Medium Weight Styles

Top and Bottom Wires No. 9 Gauge. Intermediates and Stays No. 12 Wire

635	6	35 in.	13 in.	6, 6, 7, 8, 8
726	7	26 "	13 "	3, 3, 3½, 4½, 5½, 6½
742	7	42 "	13 "	6, 6, 7, 7, 8, 8
834	8	34 "	13 "	3, 3½, 3½, 4½, 5½, 6, 8
935	9	35 "	13 "	3, 3, 3½, 4, 4½, 5, 6, 6
1050	10	50 "	13 "	3, 3½, 3½, 4½, 5½, 6, 8, 8, 8
1449	14	49 "	13 "	3, 3, 3, 3, 3, 3, 3, 3, 3½, 4, 4½, 5, 5, 6

Close Woven Hog Fencing

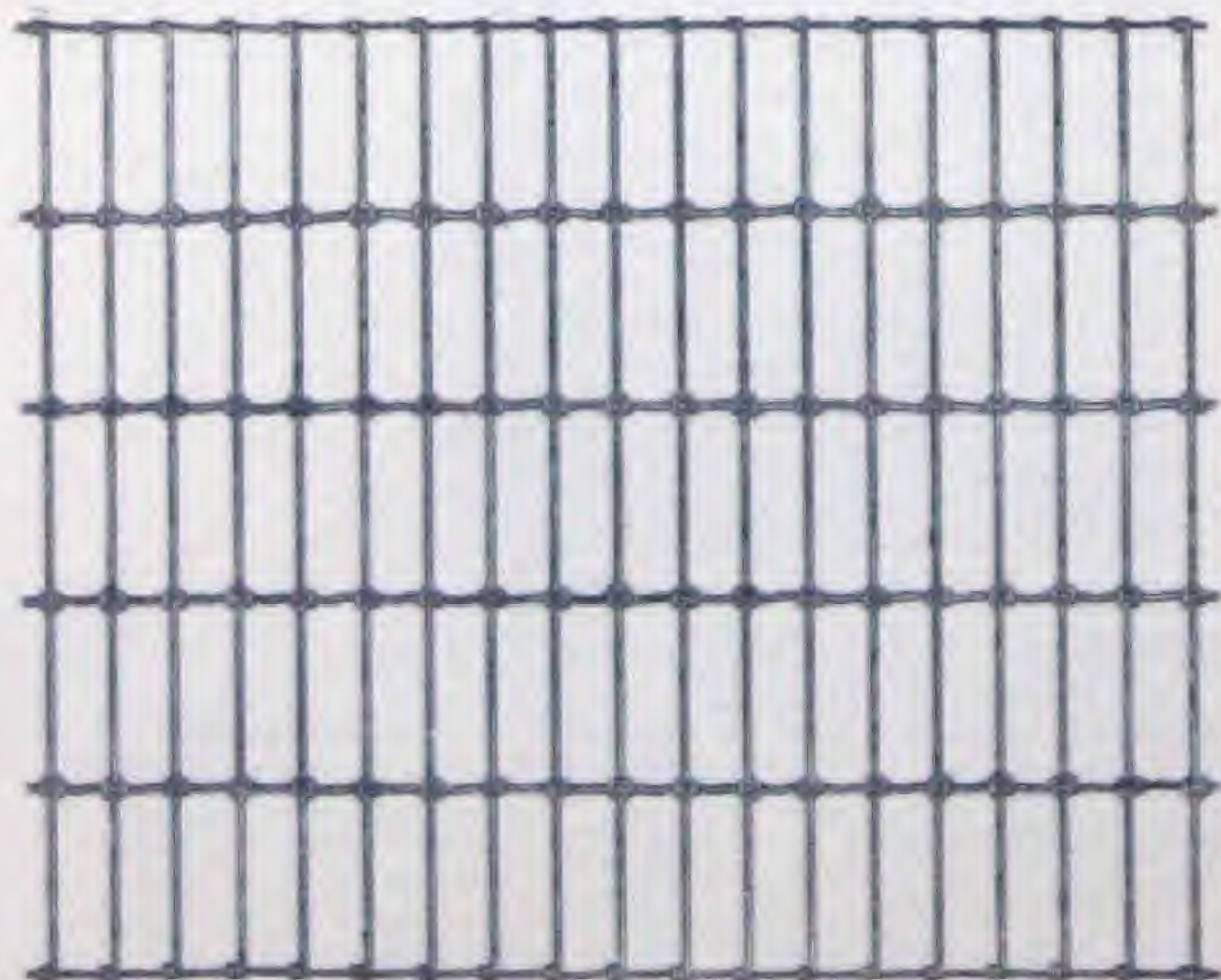
Top and Bottom Wires Standard Gauge. Intermediates and Stays No. 13 Gauge
Stays 6 inches apart

726-1	7	26 in.	6 in.	3, 3, 3½, 4½, 5½, 6½
832	8	32 "	6 "	3, 3½, 4, 4½, 5, 6, 6
1036	10	36 "	6 "	2, 2, 3, 3½, 4, 4½, 5, 6, 6

Heavy Poultry Fencing

Top and Bottom Wires Standard Gauge. Intermediates and Stays No. 13 Wire

1640	16	40 in.	8 in.	1½, 1½, 1½, 1¾, 1¾, 2, 2, 2½, 2½, 3, 3½, 3½, 4, 4½, 4½
1848	18	48 "	8 "	1½, 1½, 1½, 1¾, 1¾, 2, 2, 2½, 2½, 3, 3½, 3½, 3½, 4, 4, 4½, 5
2060	20	60 "	8 "	1½, 1½, 1½, 1¾, 1¾, 2, 2, 2½, 2½, 3, 3½, 3½, 3½, 4, 4, 4½, 5, 6, 6



Invincible

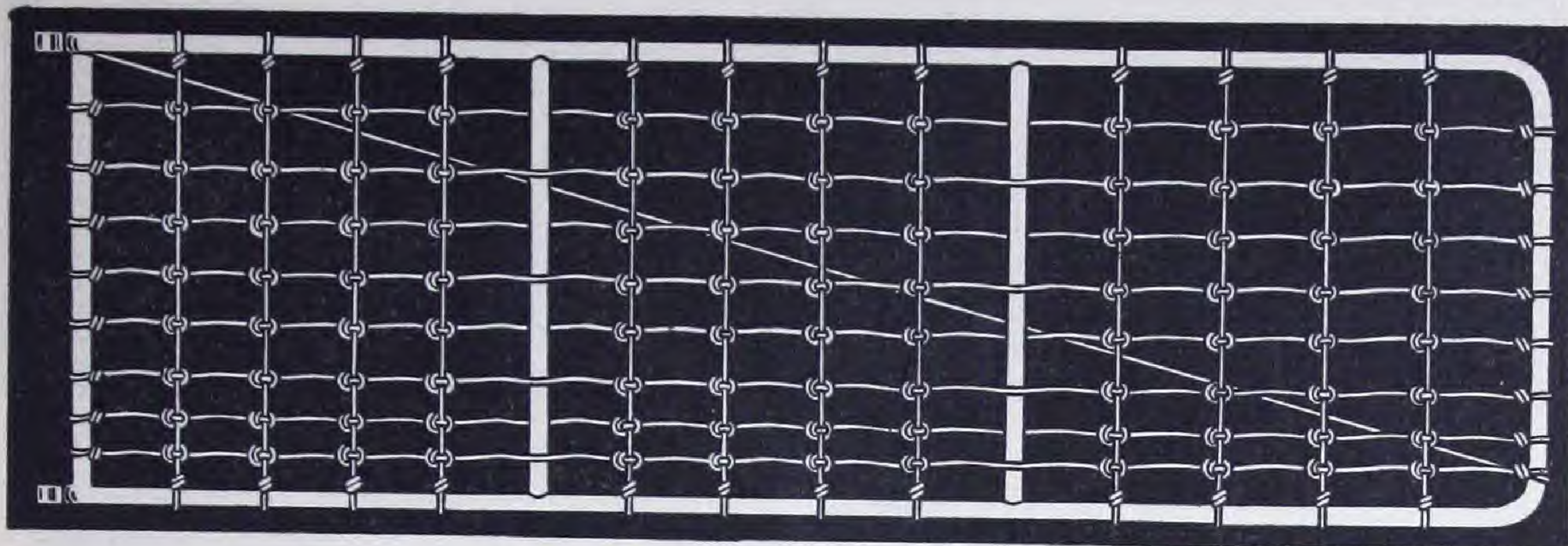
CONCRETE MESH

All No. 9 Bright Wire—.144" diameter
Longitudinal Wires Spaced 12 inches apart
Transverse Wires Spaced 4 inches apart
Mesh:—4 inches x 12 inches

Style Numbers	Width of Mesh	Wgt. per 100 Sq. Ft.	No. of Sq. Ft. per Roll	Length of Roll
660 x 4	60"	28 Lbs.	825	165 Feet
772 x 4	72"	28 Lbs.	990	165 "
884 x 4	84"	28 Lbs.	1155	165 "



Invincible Gates



INVINCIBLE "HOT DIPPED" GALVANIZED GATES

Patented 1914 and 1920

"Stelco Scale Free Pipe" which is used exclusively for making our gate frames, adds to the quality of the galvanizing as all loose scale on both inside and outside surfaces of the pipe has been removed, leaving a perfectly smooth base for the galvanizing. With the scale removed, the possibility of scale cracking off after galvanizing, leaving bare spots of the metal to rust, is eliminated.

Invincible Gates have long been known for their super strength and also bear the distinction of being the first gates to be "Hot Dipped Galvanized" which with the "scale free" improvement and our patented "square corner" feature are qualities which leave little doubt as to the gate you should buy.

Note the illustration above and the extra strong appearance of this gate:—

filling all number 9 gauge galvanized copper bearing coiled spring wire.

brace number 7 gauge copper bearing wire heavily galvanized.

connections at hinges and stays electrically welded forming the entire structure in to a solid frame of steel.

wide set hinges enable the gate to swing easily on the posts, making it impossible to sag.

hinges and latch are supplied with each gate.

Width between posts	Height Inches	Width between posts	Height Inches	Width between posts	Height Inches
3 ft. 0 in.	36 in.	4 ft. 0 in.	48 in.	10 ft. 0 in.	48 in.
3 ft. 0 in.	42 in.	5 ft. 0 in.	42 in.	12 ft. 0 in.	42 in.
3 ft. 0 in.	48 in.	5 ft. 0 in.	48 in.	12 ft. 0 in.	48 in.
3 ft. 6 in.	36 in.	6 ft. 0 in.	42 in.	13 ft. 0 in.	48 in.
3 ft. 6 in.	42 in.	6 ft. 0 in.	48 in.	14 ft. 0 in.	48 in.
3 ft. 6 in.	48 in.	8 ft. 0 in.	48 in.	16 ft. 0 in.	48 in.
4 ft. 0 in.	42 in.	10 ft. 0 in.	42 in.		

The width of a gate is considered as the opening or distance between posts. We make the allowance for hinges and latch.

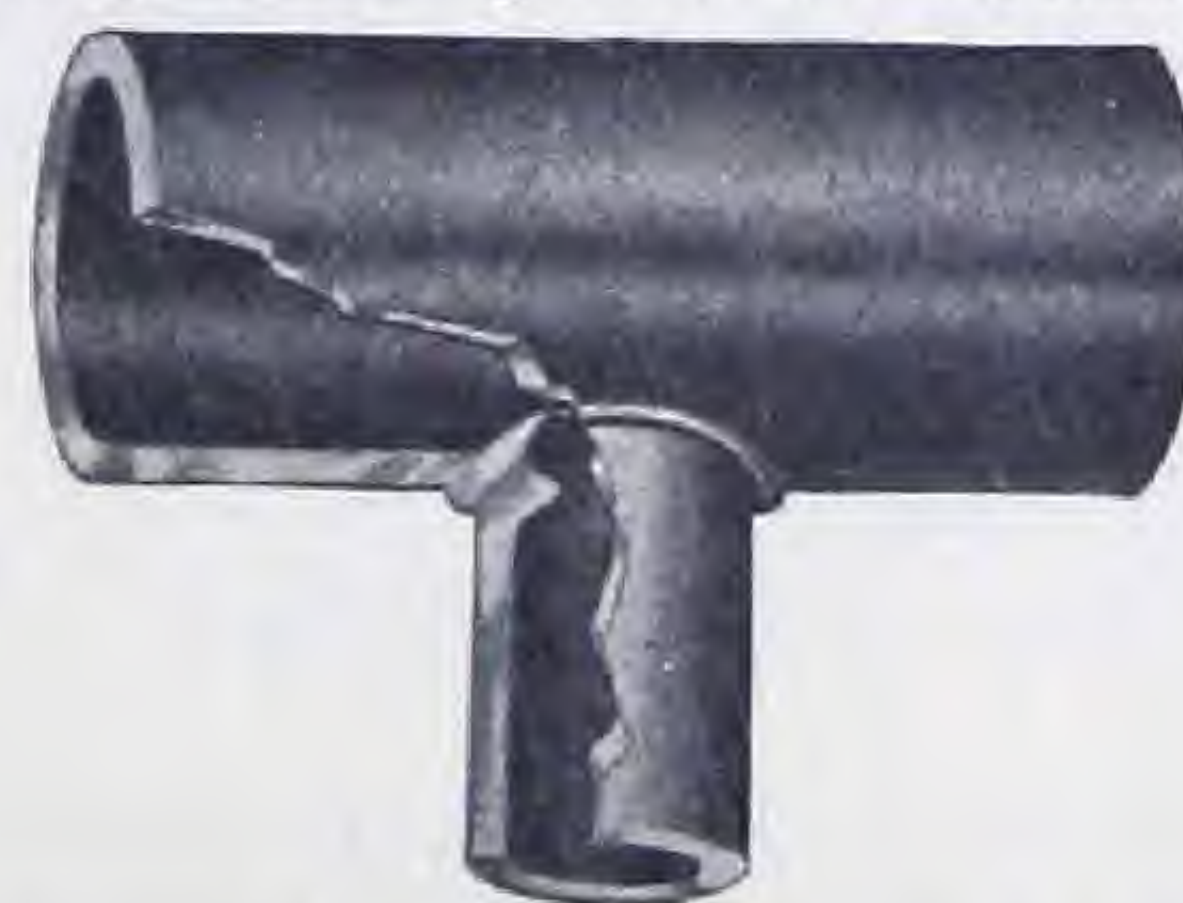
Patented Features

The Hinge Corner of the Invincible Gate, as illustrated, showing a portion partly cut away, gives a clear conception of the corner construction to be found only in our gates. This connection gives the greatest possible width between the hinges, transferring all strain in a direct pull on the upper hinge, and in direct compression on the lower hinge, placing the load directly on the gate post without any bending strains on the gate frame.

Patented 1914, 1920

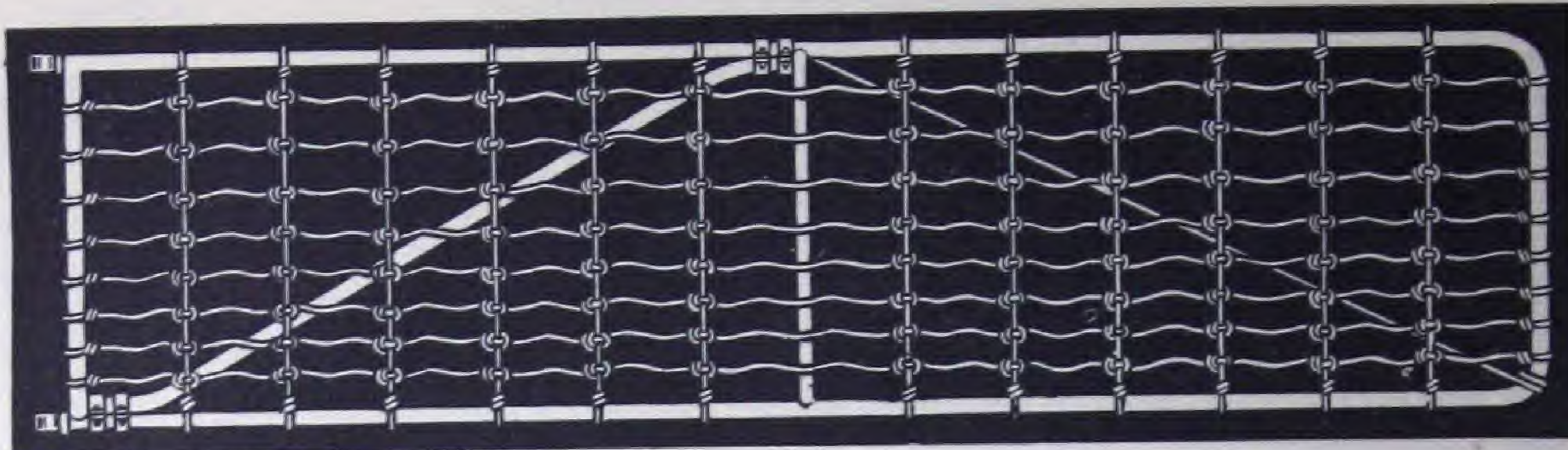


The hinge plug is made a snug fit in the pipe and then welded securely, making it impossible for the plug to pull out or turn.



This illustration shows the manner of welding the reinforcing cross-bars of "Invincible" Gates. The result is a much stiffer and stronger gate which cannot twist.

Invincible Gates



INVINCIBLE "HOT DIPPED" GALVANIZED RAILROAD GATES

Patented 1915 and 1921

The strongest and best made gate on the market.

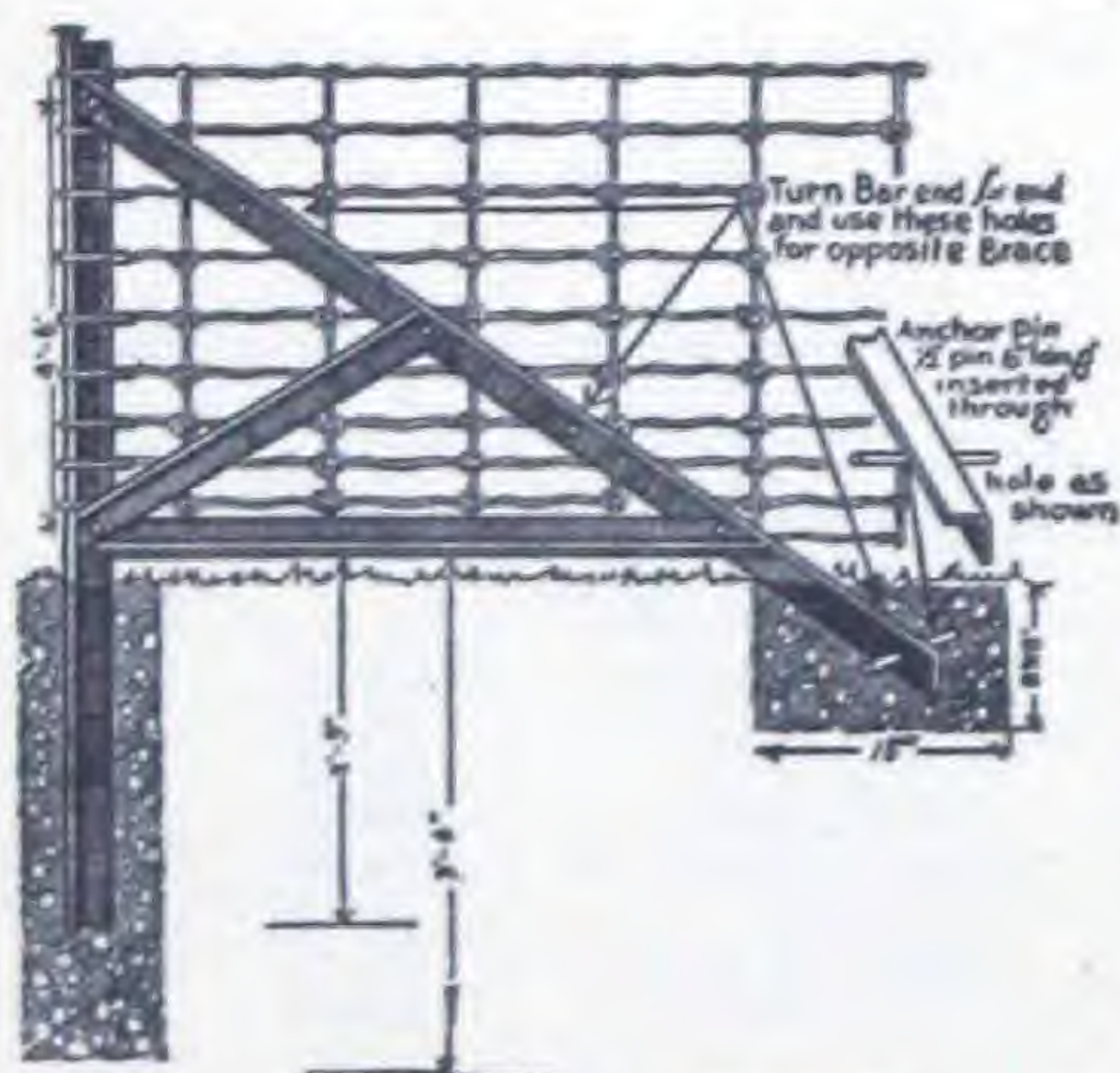
Construction.—Square corner pipe braced gate, outer frame 1" Standard Scale-Free Tubing, Scale-Free Pipe Brace $\frac{3}{4}$ ", Scale-Free Pipe Stay $\frac{1}{2}$ ", Filling No. 9 Galvanized Copper Bearing Coiled Spring Wire, Wire Brace No. 7 Galvanized Copper Bearing Wire.

The wide set Hinges in direct line with the outer frame, allow the force caused by the load on the Gate to be applied to the lower hinge, as a direct pressure against the post. This feature itself gives additional strength and prevents the Gate from sagging, a common fault with the round corner styles.

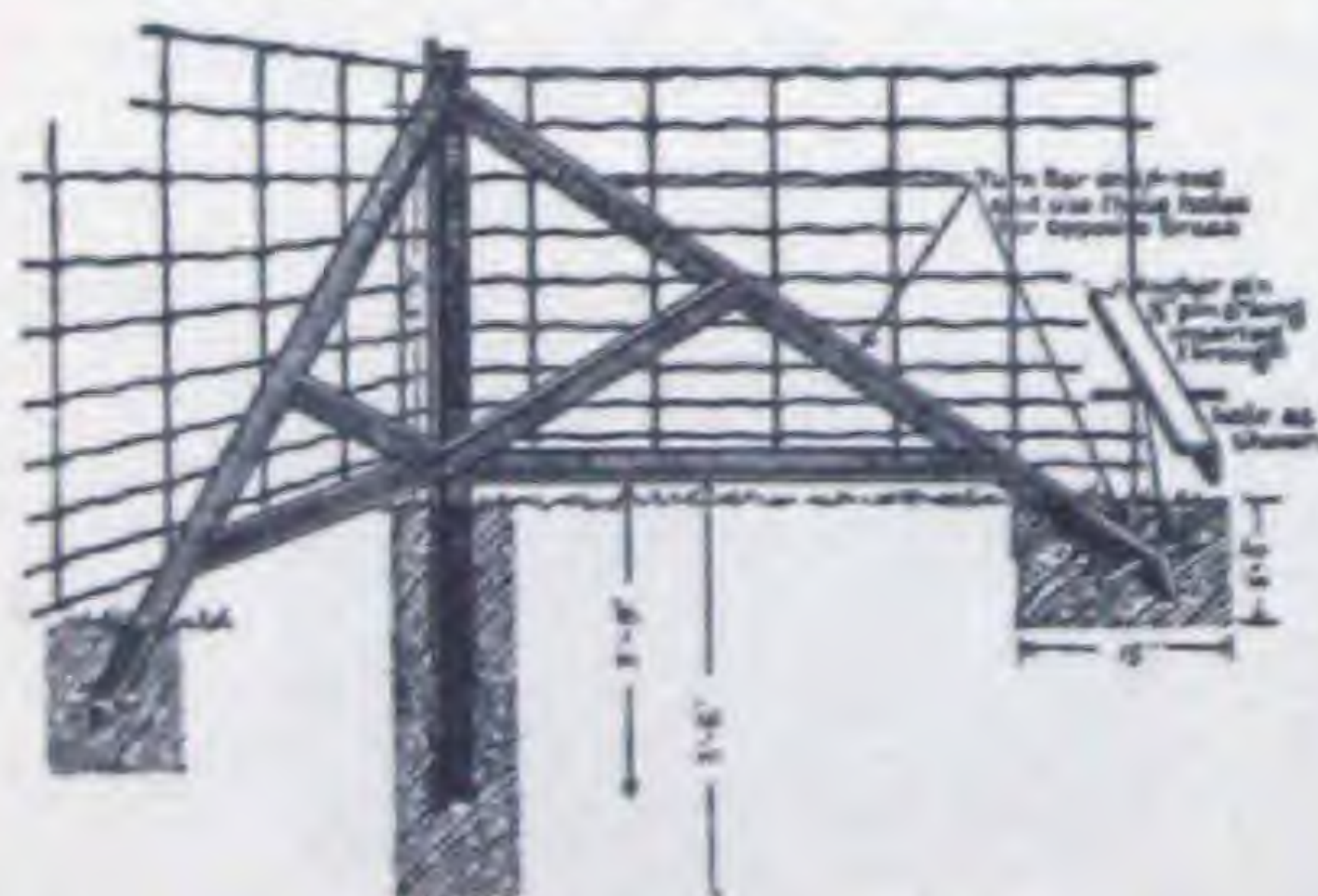
A large number of these Gates have been supplied to the Railways in Canada, and are giving very satisfactory service. Notice them along the principal Railroads, some erected for a number of years, and note particularly how well they are standing up.

Hinges and latch are supplied with each gate.

STEEL POSTS FOR FARM FENCING



Angle Iron End or Gate Post



Angle Iron Corner Post

Stelco Tee Bar Fence Posts, made of high carbon steel for greater durability, can be supplied either painted or hot dip galvanized. They are easy to drive due to the form of section. They also drive straight due to the Brace Plate which acts as a guide. When the post is driven to the required position, the brace plate holds the post rigid and true.

No clips are required with Stelco Posts. The fence wire is attached by means of lugs punched in the flanges of the post. After stretching the fence wire into position the line wires are caught into the lugs, which are bent over and hold the wire yet leave sufficient clearance to allow expansion or contraction of the wire fabric due to changing temperatures. Standard lengths of posts carried in stock are 6' 6", 7' 3" and 8' 3" long.

One man drivers and drive caps can be supplied when requested.

Stelco Tee Bar Protective Posts for barbed wire overhang are supplied 8' 3" and 9' 3" long overall. The overhang is at an angle of 45 degrees. The method of attaching the barbed wire is the same as for the line fencing.

Stelco Angle Iron End, Gate and Corner Posts, as illustrated, can be supplied also. They give permanence to the construction and serve as rigid terminals for stretching the fabric. Standard length is 7' 3".

FENCE TOOLS

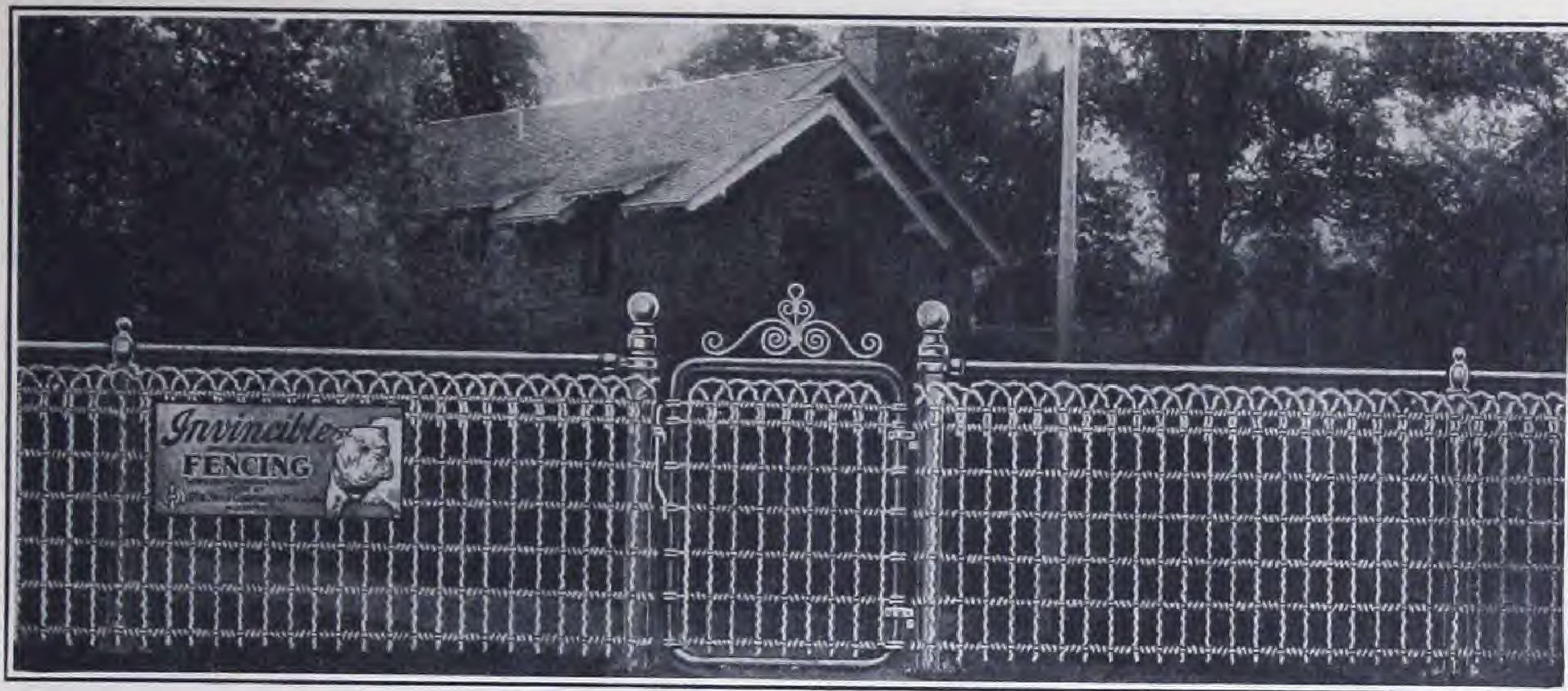
Our Stretcher is the most serviceable of any on the market to-day. Its chief point is its simplicity, very easily operated and entirely a one-man proposition. Fence can be stretched up easily and tight. Consists of one steel bar, 5 feet long, with 8 bolts and clamps, to attach to the fence. Chain consists of two lengths of nine feet each with end link for attaching to anchor post. Also crank and wrench complete.

We also carry a stock of Iwan Augers, Townsend Single Wire Stretchers and Universal Post Hole Diggers.



"T" Bar Line Post

Invincible Lawn Fencing



Style "L" Single Picket

Invincible Lawn Fence serves either city or country home, or wherever appearance must be taken into consideration as well as protection. Keeps children, animals, chickens, from interfering with flower beds, shrubs or trees.

Style "C" Double Picket

This is a somewhat heavier style of fencing than style "L", the close bottom wires adding a sense of security to the property. This fence has developed quite a preference, and when erected on steel posts and with top rail, gives exceptionally long service.

Made in heights of 36 inches, 42 inches and 48 inches.

Upright Wires No. 9 wire, crimped horizontal wires, 2 strands No. 13 wire.

Put up in rolls of 200 feet.

Can be supplied plain galvanized, or painted green over the galvanizing.

FLOWER BED GUARD

Style "L" is also made in what is designated as Flower Bed Guard or Lawn Border, the standard height is 18 inches, and every fourth picket is left longer and may be stuck in the ground, eliminating the use of posts and rails. Put up in rolls of 200 feet, and furnished galvanized and also painted green if required.



LAWN FENCING POSTS

Invincible End, Corner and Gate Posts are made of heavy quality scale free steel pipe, $2\frac{3}{8}$ in. outside diameter, line posts are $1\frac{1}{8}$ in. outside diameter scale free pipe and top rail is $1\frac{1}{8}$ in. outside diameter scale free pipe. Standard lengths of posts are 6 ft. 3 in. and 7 ft. 3 in. These posts add to the appearance of the fence, and when set in concrete require no braces.

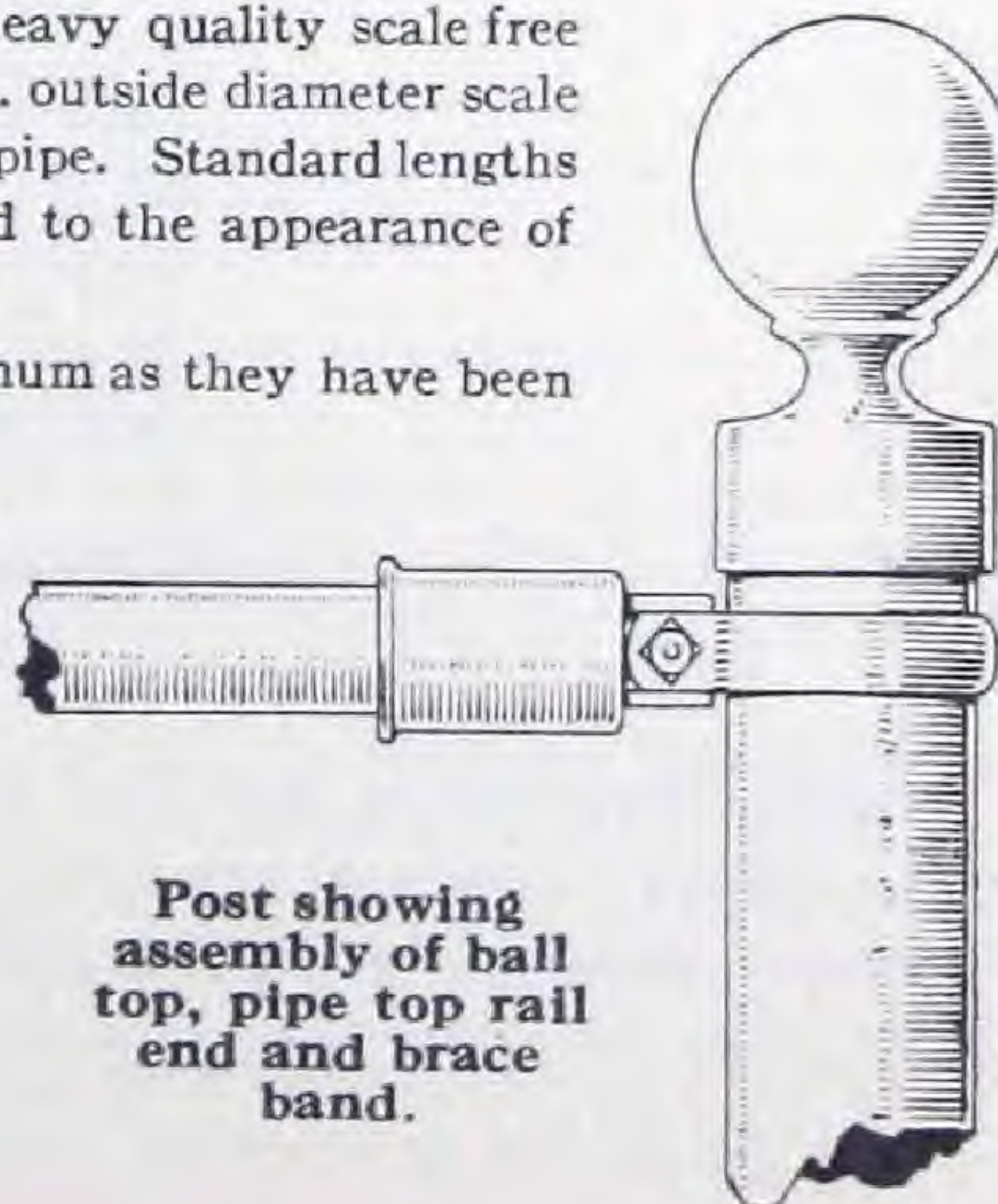
The number of fittings have been reduced to a minimum as they have been made universal for use on end, corner or gate posts.

Gate posts are also fitted with necessary hinge hooks and catch for spring latch.

Posts can be supplied painted green or hot galvanized, as specified.

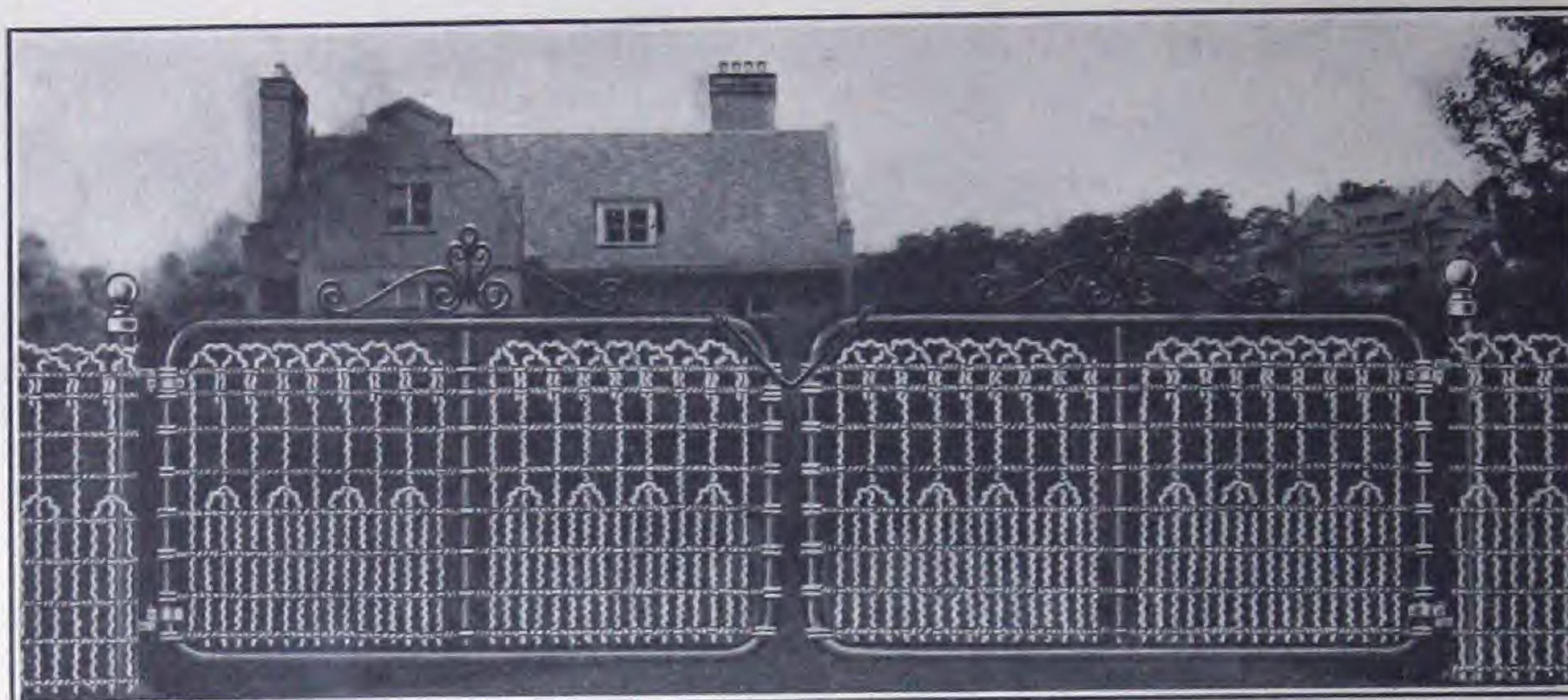


Line Post Top and Assembly for continuous pipe top rail.



Post showing assembly of ball top, pipe top rail end and brace band.

Invincible Lawn Gates



MADE IN

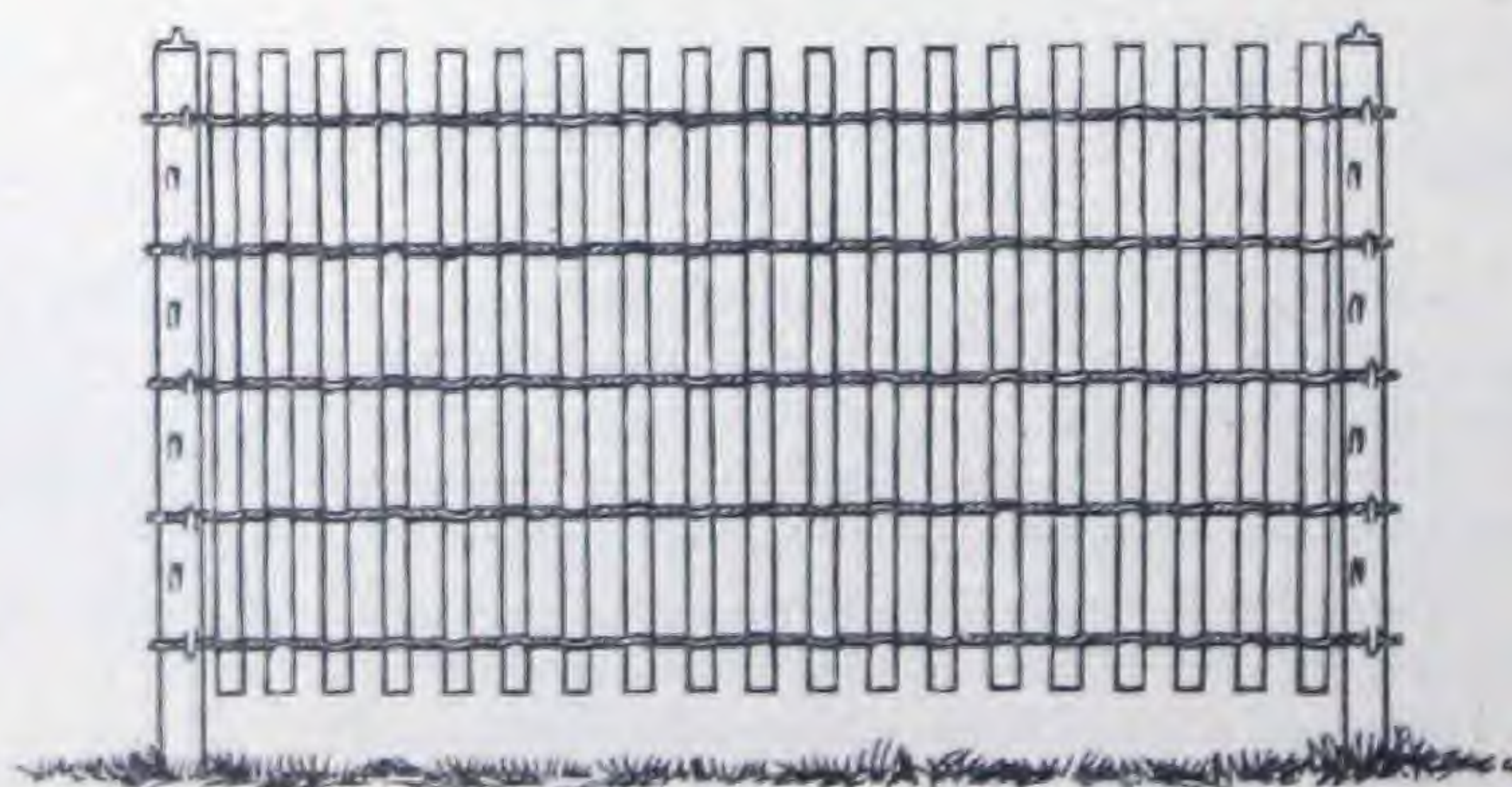
STYLES "L" OR "C" SINGLE OR DOUBLE PATTERN

PLAIN OR SCROLL TOP

Width between posts	Height Inches	Width between posts	Height Inches	Width between posts	Height Inches
3 ft. 0 in.	36 in.	4 ft. 0 in.	48 in.	10 ft. 0 in.	48 in.
3 ft. 0 in.	42 in.	5 ft. 0 in.	42 in.	12 ft. 0 in.	42 in.
3 ft. 0 in.	48 in.	5 ft. 0 in.	48 in.	12 ft. 0 in.	48 in.
3 ft. 6 in.	36 in.	6 ft. 0 in.	42 in.	13 ft. 0 in.	48 in.
3 ft. 6 in.	42 in.	6 ft. 0 in.	48 in.	14 ft. 0 in.	48 in.
3 ft. 6 in.	48 in.	8 ft. 0 in.	48 in.	16 ft. 0 in.	48 in.
4 ft. 0 in.	42 in.	10 ft. 0 in.	42 in.		

The width of a gate is considered as the opening or distance between posts. We make the allowance for hinges and latch.

SNOW FENCE

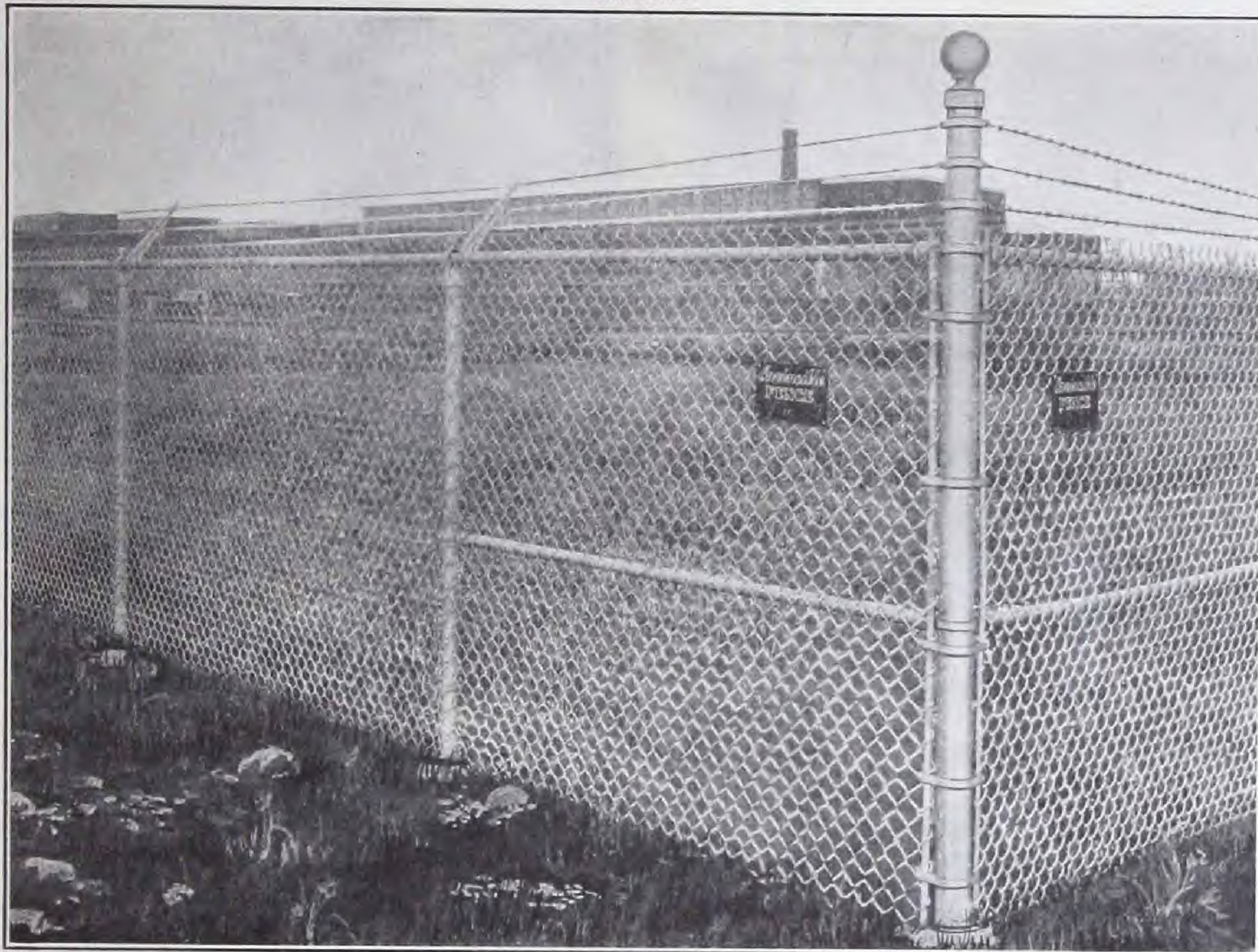


Stelco Snow Fence, made for temporary erection during the winter season, is easily erected, quickly removed and requires very little storage space. It is 4 feet high and consists of $\frac{3}{8}$ " x $1\frac{1}{2}$ " first grade lumber, preservative dipped pickets spaced 2" apart and woven together by five 2 strand cables of galvanized copper bearing steel wire. Put in rolls containing 100 lineal feet.

STELCO
MADE

Invincible
CHAIN LINK FENCING

*Copper
Bearing*
WIRE
THROUGHOUT



The uses of Invincible Chain Link Fencing are many, in each instance giving the utmost in protection. Styles range from Heavy Protection Fence used chiefly for industrial plants, school grounds, etc.; Fox Fabric for barriers and pens; Suitable Weights for tennis courts, baseball backstops, cemeteries, lawns, etc.; to the Light Fabric used for muskrat farms and other fur-bearing animals such as beaver, mink, rabbits and raccoon.

The steel used in the drawing of our wire is Copper Bearing Open Hearth quality. Our wire galvanizing departments are equipped to supply chain link fabric either (a) galvanized after woven, (b) woven from galvanized wire. All posts, top rails, braces and gate frames are made of Stelco Scale Free Pipe. All pipe is cut to length in our pipe mill and then galvanized inside and outside after cutting.

In designing Invincible Chain Link Fittings careful thought has been given to appearance as well as to strength and utility value. Our malleable iron barbed wire arm bears particular merit in design and arrangement for fastening the barbed wire—on all fittings flat horizontal surfaces have been eliminated to avoid ledges on which snow or moisture could collect, these are some of the little details carefully studied and taken into consideration which make Invincible Fence constructions more attractive in appearance and add thoroughness in guarding against the possibility of rust in any part of the construction.

For permanency and rigid construction we recommend all posts being set in concrete and for this purpose maintain a staff of experienced fence erectors who are prepared to handle constructions complete and at a very nominal cost. If preferred we can furnish the services of an experienced fence erection superintendent only, to supervise the work under your direction. Where you undertake the construction yourself we will supply blueprint giving construction details for setting posts, location of fittings, etc.

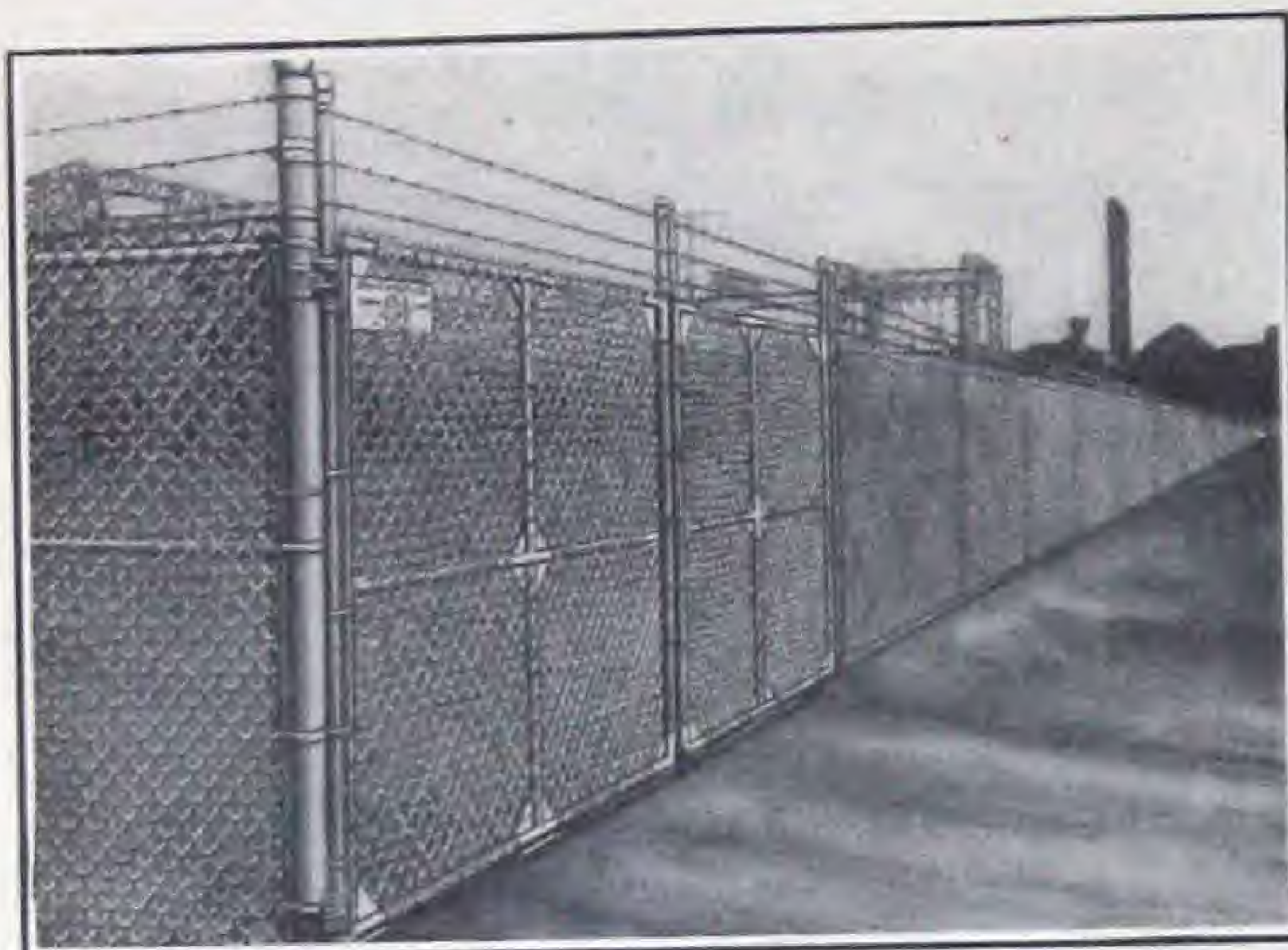
All styles and sizes of chain link fabric listed in this catalogue are carried in stock; the heavy styles in rolls of 50 lineal feet and the light styles in rolls of 100 lineal feet. Whether you are requesting a quotation or placing your order for Invincible Chain Link Fencing we will find it helpful in determining your proper requirements if you will furnish us with a rough sketch of the fence line showing position of gates and stating in each case if walk, drive or railway gate is required. It is also necessary to mention the height of fence required, stating whether the total height is to be all fabric or fabric with barbed wire overhang. With each request for information, estimate or quotation a blueprint will be furnished showing construction information in detail.



Invincible

CHAIN LINK FENCING—Cont'd

For Industrial Plants



Invincible Chain Link Fence is a practical barrier for all property protection purposes being easily adapted to use under difficult and unusual conditions.

Its small sturdy mesh allows no toe-hold and is therefore unclimbable, compelling all, who seek entrance or wish to leave the property, to apply at the gate.

SPECIFICATION

6, 7, 8, 9 and 10 foot heights.

2" Mesh No. 9 or No. 6 Gauge Copper Bearing Open Hearth Steel Wire Fabric, (a) galvanized after woven, (b) woven from galvanized wire. Edges, one barbed and other knuckled or both edges knuckled. Construction throughout, Hot Galvanized. $3\frac{1}{2}$ " O.D. Scale Free Pipe End, Gate and Corner Posts. $2\frac{3}{8}$ " O.D. Scale Free Pipe Line Posts. $1\frac{1}{16}$ " O.D. Scale Free Pipe continuous Top Rail. Erected with or without three strands of barbed wire.

For School and Municipal Playgrounds



Invincible Chain Link Fence is well suited for school grounds, affording the necessary protection to pupils and property while its close mesh allows no toe-hold, making it impossible for children to climb. Also on account of its sturdy construction it can withstand the abuse to which a large group of children are bound to subject it.

SPECIFICATION

6, 7, 8, 9 and 10 foot heights.

2" Mesh No. 9 or No. 6 Gauge Copper Bearing Open Hearth Steel Wire Fabric. (a) galvanized after woven, (b) woven from galvanized wire. Edges, one barbed and other knuckled or both edges knuckled. Construction throughout, Hot Galvanized. $3\frac{1}{2}$ " O.D. Scale Free Pipe End, Gate and Corner Posts. $2\frac{3}{8}$ " O.D. Scale Free Pipe Line Posts. $1\frac{1}{16}$ " O.D. Scale Free Pipe continuous Top Rail. Erected with or without three top strands of barbed wire.

For Tennis Courts



Invincible Chain Link Tennis Court Enclosures are strongly recommended where a durable, permanent and economical fencing is required. The superiority of the fabric to light gauge wire netting is unquestioned not only on account of its permanence and low maintenance cost but it does not sag, bulge or become distorted.

SPECIFICATION

10 and 12 foot heights furnished full height in one piece.

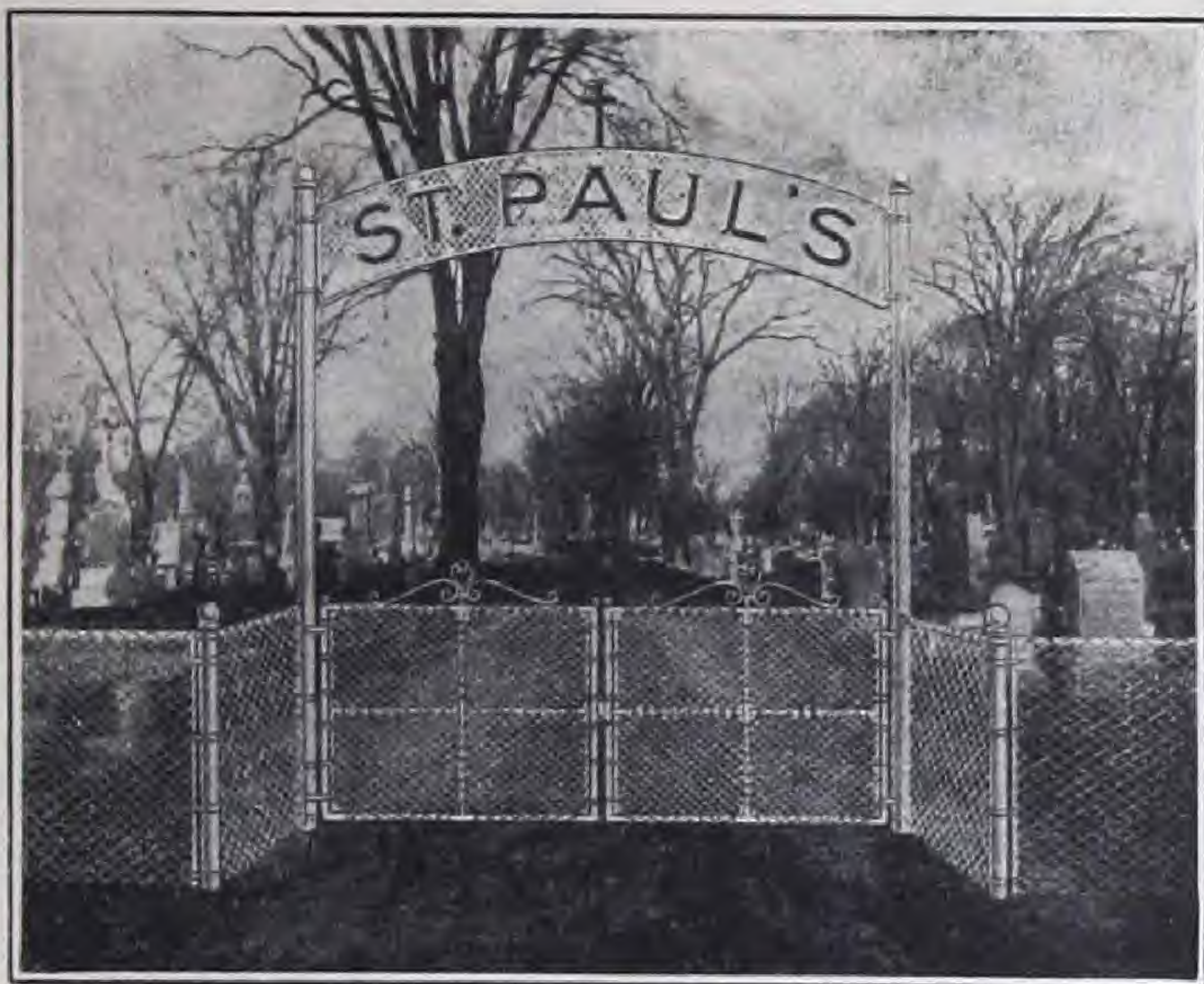
$1\frac{1}{2}$ " Mesh No. 14 or No. 12 Gauge Copper Bearing Open Hearth Steel Wire Fabric galvanized after woven. Knuckled both edges. Construction throughout, Hot Galvanized. 3" O.D. Scale Free Pipe End, Gate and Corner Posts. $1\frac{7}{8}$ " O.D. Scale Free Pipe Line Posts. $1\frac{5}{16}$ " O.D. Scale Free Pipe Continuous Top Rail.



Invincible

CHAIN LINK FENCING—Cont'd

For Cemeteries



Invincible Chain Link Fence is an ideal cemetery enclosure. It lends itself readily to the usual unevenness of the ground in the wooded sections where cemeteries are located, it serves as a constant protection and commands reverence and respect. Arches can be provided with any lettering desired which will fit into the space.

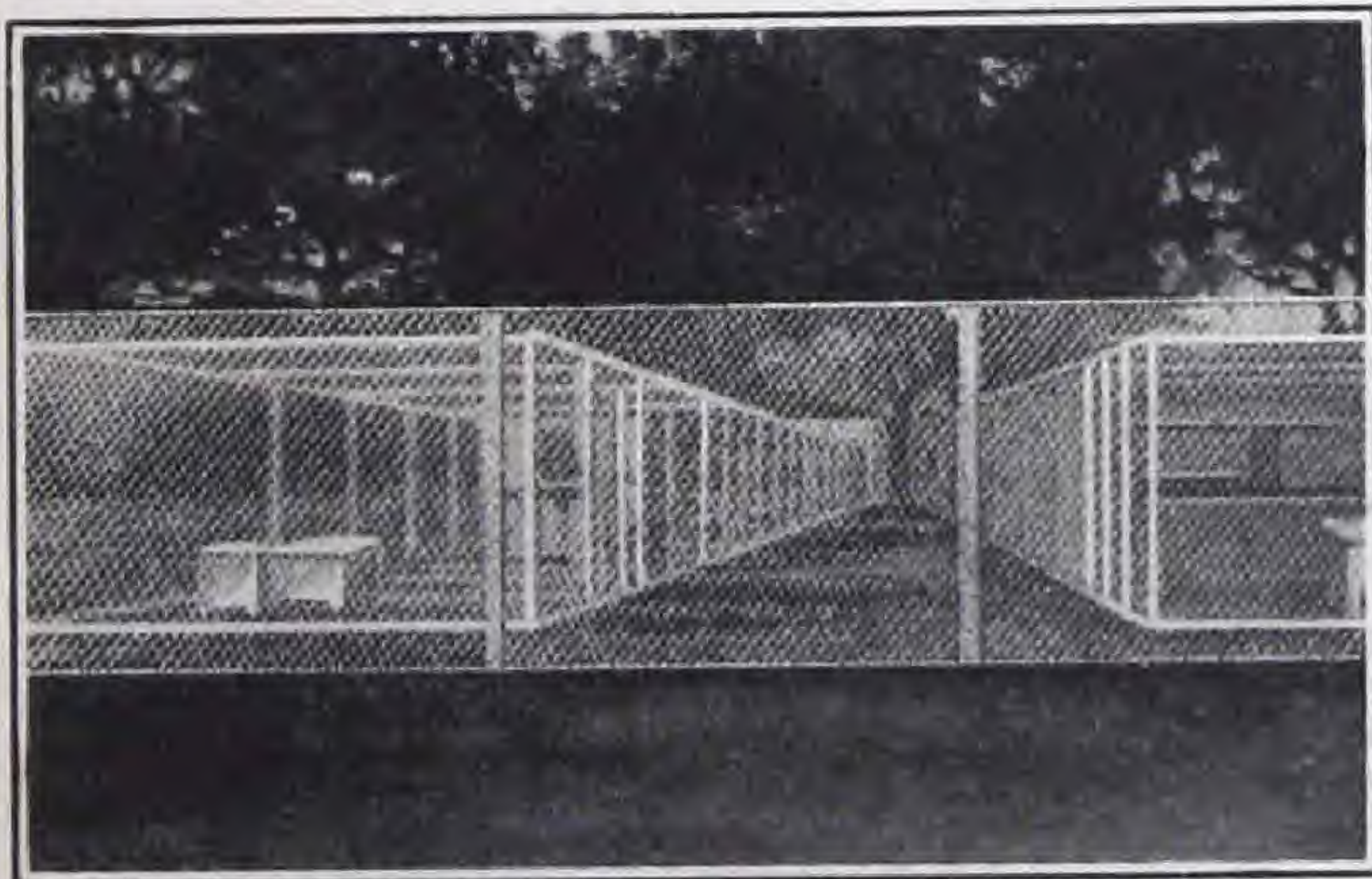
SPECIFICATION

4, 5, 6 and 7 foot heights.

2" Mesh No. 9 Gauge Copper Bearing Open Hearth Steel Wire Fabric, (a) galvanized after woven, (b) woven from galvanized wire.

Light Construction.—Construction throughout Hot Galvanized. 3" O.D. Scale Free Pipe End, Gate and Corner Posts. 1 7/8" O.D. Scale Free Pipe Line Posts. 1 5/16" O.D. Scale Free Pipe continuous Top Rail.

Heavy Construction.—Construction throughout Hot Galvanized. 3 1/2" O.D. Scale Free Pipe End, Gate and Corner Posts. 2 3/8" O.D. Scale Free Pipe Line Posts. 1 11/16" O.D. Scale Free Pipe continuous Top Rail. Erected with or without three strands of barbed wire.



Invincible Chain Link Fox Fabric gives the breeder complete confidence in his enclosures—foxes cannot break through the wire. The gauge of the wire makes it considerably stronger than any strain a fox or foxes can put upon it. This is due to the nature of weaving the fabric, each joint is entirely free to work as a hinge, unlike the solid joints of netting on which the galvanizing gradually flakes leaving bare spots to corrode with the danger of foxes breaking through and escaping.

SPECIFICATION

1 1/2" Mesh No. 15 1/2, No. 14 or No. 12 Gauge, also 2" Mesh No. 12 Gauge Copper Bearing Open Hearth Steel Wire Fabric, (a) galvanized after woven, (b) woven from galvanized wire. Knuckled both edges.

For Lawns and Estates



Chain Link Fabric lends itself very readily as a lawn fence, adding beauty and value to the property as well as acting as a constant protection.

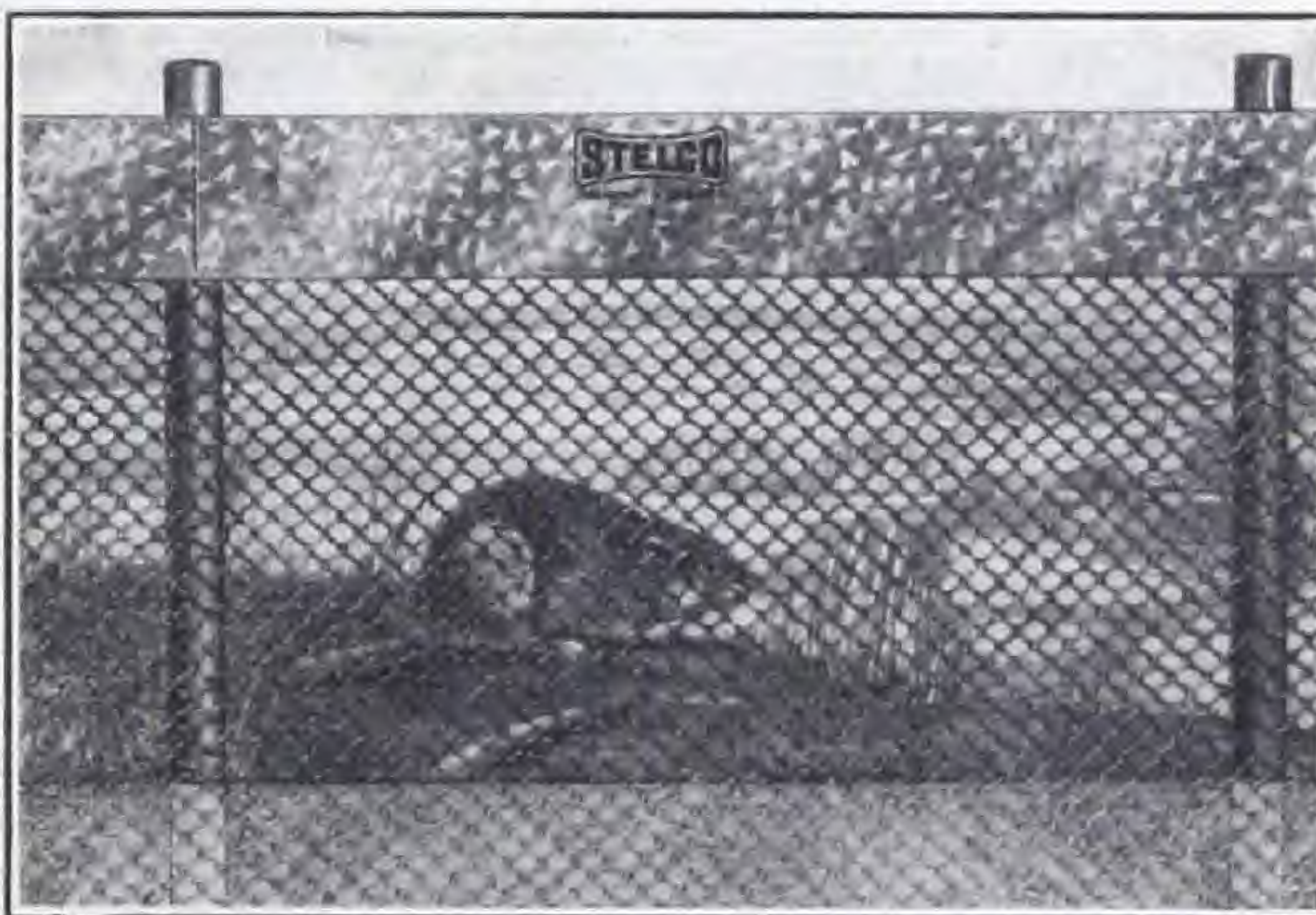
SPECIFICATION

3, 3 1/2, 4, 5 and 6 foot heights.

2" Mesh No. 9 Gauge Copper Bearing Open Hearth Steel Wire Fabric, (a) galvanized after woven, (b) woven from galvanized wire. Knuckled both edges or barbed on one edge.

Light Construction.—Construction throughout Hot Galvanized. 3" O.D. Scale Free Pipe End, Gate and Corner Posts. 1 7/8" O.D. Scale Free Pipe Line Posts. 1 5/16" O.D. Scale Free Pipe continuous Top Rail.

Heavy Construction.—Construction throughout Hot Galvanized. 3 1/2" O.D. Scale Free Pipe End, Gate and Corner Posts. 2 3/8" O.D. Scale Free Pipe Line Posts. 1 11/16" O.D. Scale Free Pipe continuous Top Rail.



SPECIFICATION

Muskrat fabric is supplied in 4, 5 and 6 foot widths and is usually erected placing one foot of fabric below the ground level and lacing a strip of galvanized sheet 12" wide along the top, which is also fastened to the posts. In many cases a single strand of barbed wire is also stretched along the top, fastening it directly to the galvanized strip.

Invincible Muskrat Fabric is 1" Mesh No. 15 1/2 Gauge Copper Bearing Open Hearth Steel and is supplied (a) galvanized after woven, (b) woven from galvanized wire.

Galvanized Sheets No. 28 gauge 12" wide x 10'0" long, punched ready to apply.

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Invincible

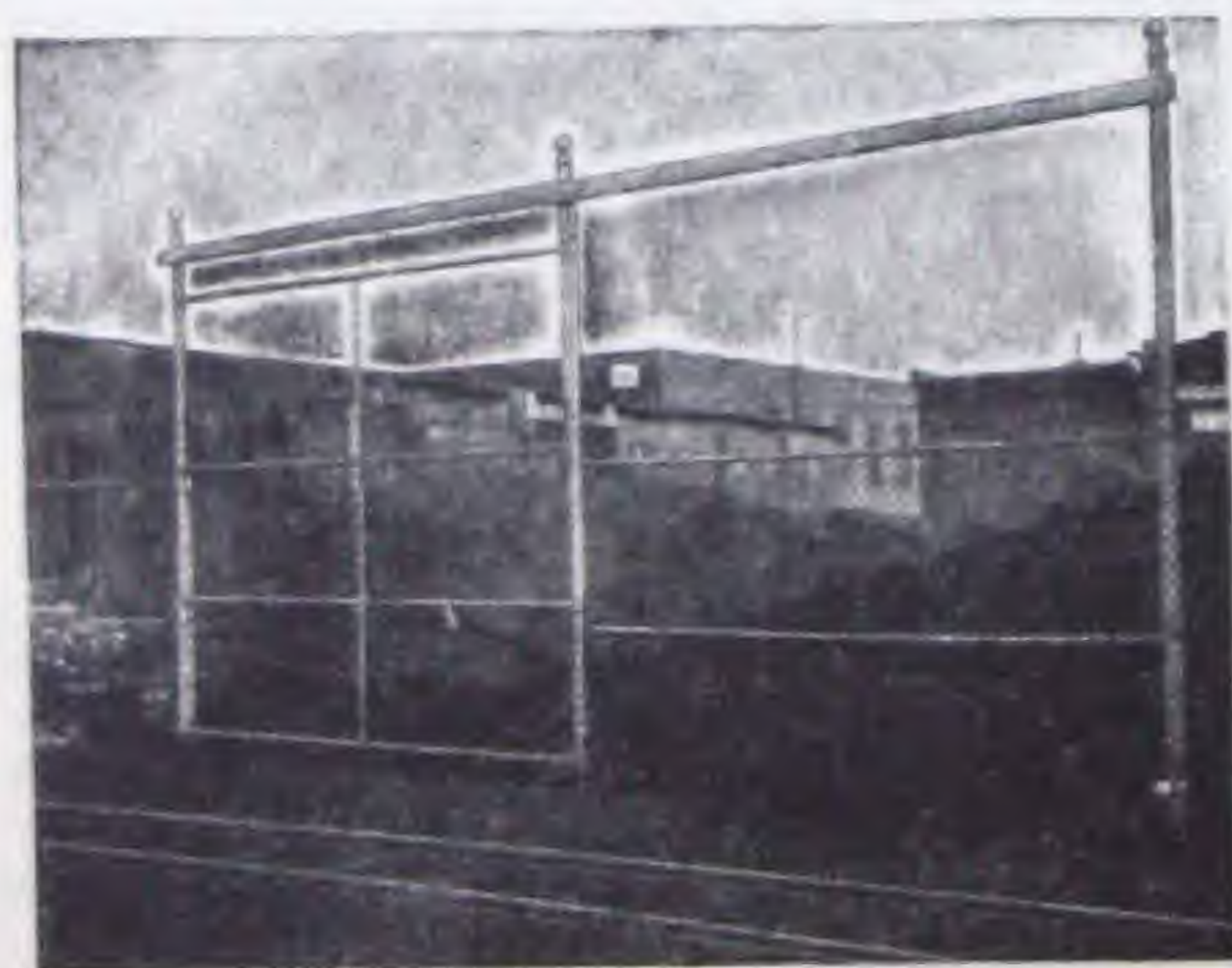
CHAIN LINK GATES



Invincible Chain Link Industrial Gates are constructed of $1\frac{1}{16}$ " O.D. Galvanized Scale Free Pipe, reinforced at the corners with pressed steel shapes designed to act as gussets. Additional stiffness is given the entire structure by two Galvanized Scale Free Pipe Braces, one running horizontal and the other vertical, the intersection and connections to the outside frame being made by carefully designed pressed steel shapes. All fittings are hot galvanized. Gates can also be supplied with welded corners.

Small Single Gates are constructed of $1\frac{1}{16}$ " O.D. Galvanized Scale Free Pipe and are of the welded frame pattern with horizontal brace securely welded to the outside frame.

All gates are filled with Invincible Copper Bearing Chain Link Fabric, (a) galvanized after woven, (b) woven from galvanized wire, with or without barbed wire to match the fencing. The dimension of a gate is the distance between posts as we make all allowances for hinges and latches which we supply. Attractive scroll top also can be provided when gates are being used with lawn fence construction.



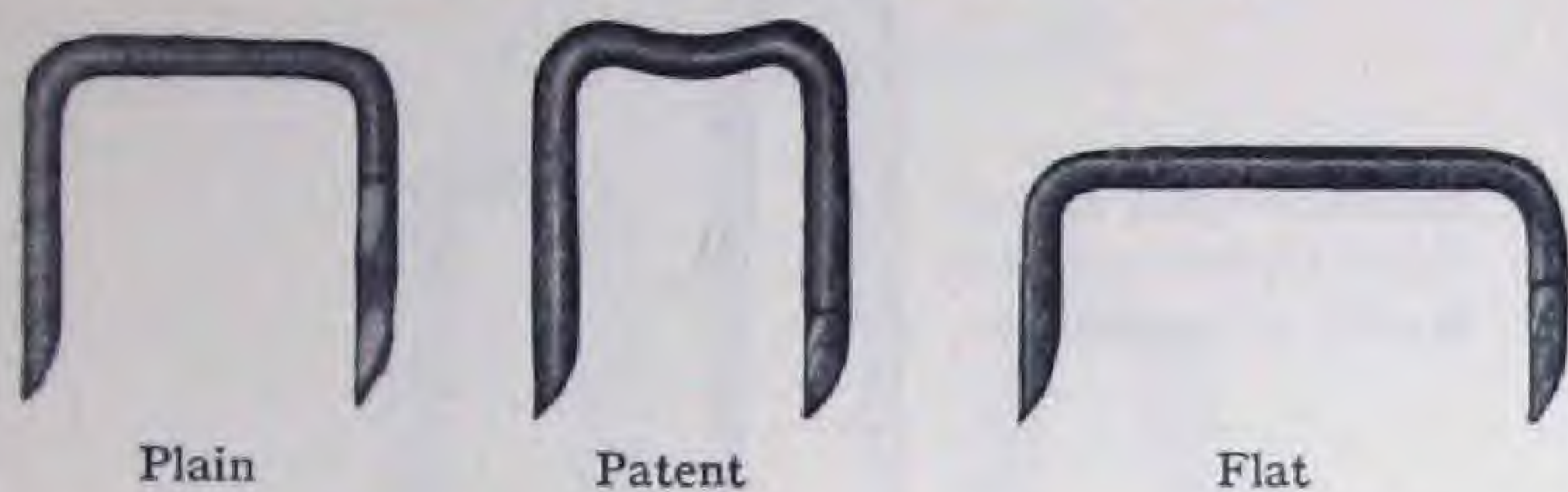
Sliding Gate Pattern



Welded Corner Pattern

STAPLES

BARREL OR BOX STAPLES



Style	Length of leg inside inches	Width inside inches	Gauge	List price per 100 lbs.
Plain Round	3/4	5/8	14	\$28.50
Round Patent	3/4	5/8	15	30.80
Flat	3/8	3/4	12 1/2 x 17	30.80
Flat	3/8	3/4	13 1/2 x 18	30.80

The above styles can be made in any size up to and including 1" leg x 1" width inside.

Net extras per 100 lbs.

50 Lb. Boxes	\$1.00
25 Lb. "	1.00
10 Lb. "	1.50
1 Lb. Papers	2.00

An additional net extra of \$2.00 per 100 lbs. will be added for less than 100 Lbs. of one size in one pound papers.

BED STAPLES

Round Steel Wire,
Bright or Coppered.



List Price per 100 lbs. in Kegs.

Length inside, inches...	1/2	5/8	3/4	7/8	1
Width inside, inches...	1/8	1/8	1/8	1/8	1/8
S.W.G. No.	16	16	15	14	14
Approx. No. per pound	1168	896	600	512	464
List Price	\$32.45	31.35	30.40	29.00	28.50

Net extras per 100 lbs.

50 Lb. Boxes	\$1.00
25 Lb. "	1.00
10 Lb. "	1.50
1 Lb. Papers	2.00

An additional net extra of \$2.00 per 100 lbs. will be added for less than 100 Lbs. of one size in one pound papers.

BLIND STAPLES



Bright or
Coppered Steel
Wire, S.W.G.
No. 18.

List Prices per 100 lbs. in Kegs

Length, inches	3/8	1/2	5/8	3/4	7/8
Approx. No. per pound	2592	1920	1648	1408	1360
List Price	\$42.65	40.45	39.70	38.30	37.50

Net extras per 100 lbs.

50 Lb. Boxes	\$1.00
25 Lb. "	1.00
10 Lb. "	1.50
1 Lb. Papers	2.00

An additional net extra of \$2.00 per 100 lbs. will be added for less than 100 Lbs. of one size in one pound papers.

BROOM STAPLES



Same shape as Electricians' Staples, Round or Flat Crown, made from flat steel wire, bright or coppered.

Length Inside Inches	Width Inside Inches	S.W.G. No.	Approx. No. per lb.	List Price per 100 lbs.
1/2	5/16	12 1/2 x 17	865	\$35.15
5/8	5/16	12 1/2 x 17	755	33.30
3/4	5/16	12 1/2 x 17	647	31.20
7/8	5/16	12 1/2 x 17	537	30.00
1	5/16	12 1/2 x 17	420	29.00

Net extras per 100 lbs.

50 Lb. Boxes	\$1.00
25 Lb. "	1.00
10 Lb. "	1.50
1 Lb. Papers	2.00

An additional net extra of \$2.00 per 100 lbs. will be added for less than 100 Lbs. of one size in one pound papers.



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STAPLES—Cont'd

COOPERS OR HOOP STAPLES

Flat Steel Wire,
Coppered or Bright.



Length Inside, Inches	Width Inside, Inches	S.W.G. No.	Approx. No. per lb.	List Price per 100 lbs.
1/2	1/2	13 1/2 x 18	752	\$31.75
1/2	5/8	12 1/2 x 17	655	31.75
5/8	5/8	12 1/2 x 17	600	30.80
5/8	3/4	12 1/2 x 17	500	30.80
3/4	1/2	12 1/2 x 17	600	29.00
3/4	3/4	12 1/2 x 17	535	29.00

Net extras per 100 Lbs.

50 Lb. Boxes	\$1.00
25 Lb. "	1.00
10 Lb. "	1.50
1 Lb. Papers	2.00

An additional net extra of \$2.00 per 100 Lbs. will be added for less than 100 Lbs. of one size in one pound papers.

Sizes larger than those listed will be considered also.

ELECTRICIANS' STAPLES

Round or flat crown,
made from steel wire,
bright or coppered.



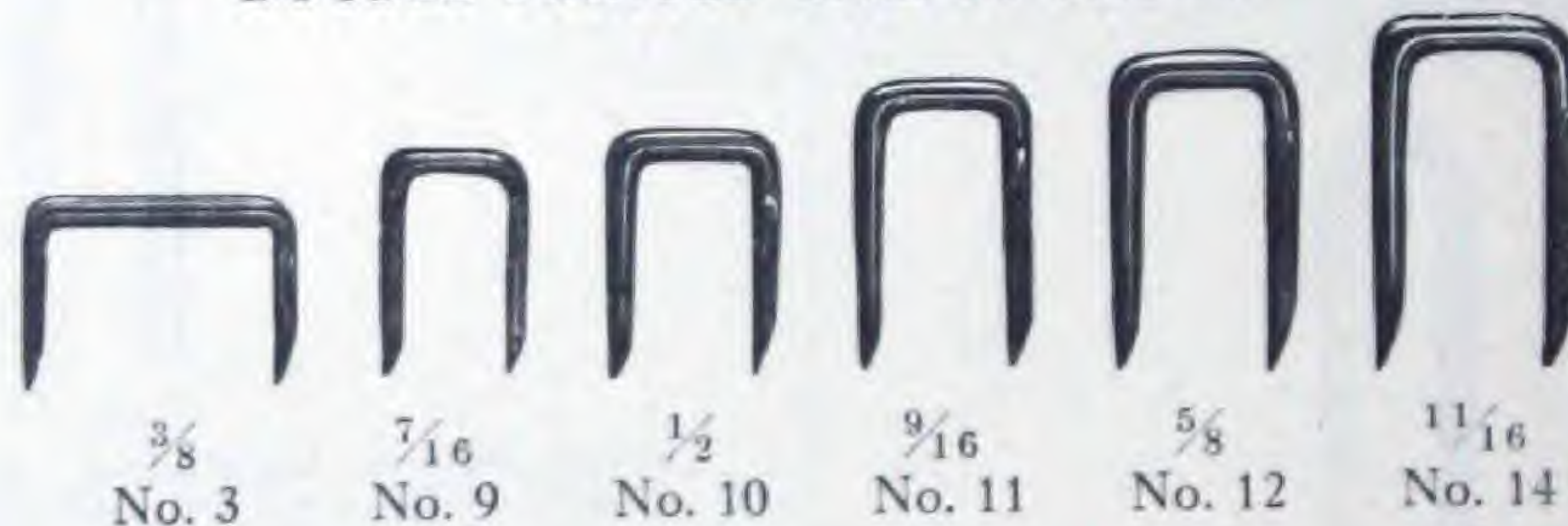
Length Inside, Inches	Width Inside, Inches	S.W.G. No.	Approx. No. per lb.	List Price per 100 lbs.
3/8	1/8	14 1/2 x 19	1680	\$36.35
1/2	1/8	13 1/2 x 18	1344	35.15
5/8	5/32	13 1/2 x 18	800	33.30
3/4	5/32	12 1/2 x 17	688	31.20
7/8	5/32	12 1/2 x 17	592	30.00
1	3/16	12 1/2 x 17	464	29.00
1	3/16	10 1/2 x 15	428	.....

Net extras per 100 Lbs.

50 Lb. Boxes	\$1.00
25 Lb. "	1.00
10 Lb. "	1.50
1 Lb. Papers	2.00

An additional net extra of \$2.00 per 100 Lbs. will be added for less than 100 Lbs. of one size in one pound papers.

DOUBLE POINTED CARPET TACKS



3/8 No. 3 7/16 No. 9 1/2 No. 10 9/16 No. 11 5/8 No. 12 11/16 No. 14

Blued, coppered or tinned, flat steel wire. Blued and tinned tacks are standard, others to order.

Size No.	Width Inside, Inch	Length Inside, Inch	Per dozen papers of 75 tacks per paper		100-pound Kegs, Blued or Coppered	Approximate Number per Pound
			Blued or Coppered	Tinned		
3	1/2	3/8	\$1.10	\$1.70	\$34.20	.....
9	7/32	7/16	1.10	1.70	34.20	1344
10	1/4	1/2	1.30	2.05	31.15	1248
11	1/4	9/16	1.40	2.10	30.85	1136
12	9/32	5/8	1.50	2.30	30.55	768
14	5/16	11/16	1.60	2.50	29.00	656

Net extras per 100 Lbs.

50 Lb. Boxes	\$1.00
25 Lb. "	1.00
10 Lb. "	1.50
1 Lb. Papers	2.00

An additional net extra of \$2.00 per 100 lbs. will be added for less than 100 lbs of one size in one pound papers.

Weight per dozen when packed in dozens

Size No.	Weight in Ounces
3	16
9	9
10	11
11	16
12	17
14	19

All packed 48 dozen cartons to the case. Each carton contains 1 dozen papers.

STAPLES—Cont'd

FENCE STAPLES

Bright or Galvanized



Length inside, in inches..	1	1 1/4	1 1/2	1 3/4	2
Width inside, in inches..	3/16	3/16	3/16	3/16	3/16
S.W.G. No.....	9	9	9	9	9
Approx. Number per lb..	110	89	74	67	60

Price on Application.

PAIL EYE STAPLES OR PAIL EARS

List Price
per 100 Lbs.
in Kegs



Made from
round coppered
wire

Length of Long Leg, Inside.....	7/8"	3/4"
" " Short Leg "	5/8"	1/2"
S.W.G. No.....	13	14
Approx. Number per pound.....	260	260
List Price.....	\$29.00	\$30.80

Net extras per 100 Lbs.

50 Lb. Boxes.....	\$1.00
25 Lb. "	1.00
10 Lb. "	1.50
1 Lb. Papers.....	2.00

An additional net extra of \$2.00 per 100 lbs. will be added for less than 100 pounds of one size in one pound papers.

SINGLE LEG HOOP STAPLES

Bright or
Galvanized



No.....	3	2	1	0
Length Inches.....	3/8	1/2	3/4	1
S.W.G.....	13	10 1/2	9	6
Approx. Number per lb....	976	308	212	118

Packed 100 Lbs. in Kegs.
Price on Application.

POULTRY NETTING STAPLES



Sizes

Length inside, in inches..	3/8	3/4	7/8	1	1 1/4
Width inside, in inches..	3/32	5/32	3/16	3/32	3/32
S.W.G. No.....	14	13	13	13	13
Approx. Number per lb..	512	336	284	260	212

List Prices per 100 Lbs.

Bright.....	\$7.50
Galvanized.....	8.50

Net extras per 100 Lbs.

50 Lb. Boxes.....	\$1.00
25 Lb. "	1.00
10 Lb. "	1.50
1 Lb. Papers.....	2.00

An additional net extra of \$2.50 per 100 lbs. will be added for less than 100 pounds of one size in one pound papers.

BOX STRAPPING STAPLES



Made from Bright
Round Wire, Barbed

Length inside in inches.....	3/8"	3/4"
Width inside, in inches.....	3/16"	1/2"
S.W.G. No.....	14	14
Approx. Number per lb.....	590	696
List Price per 100 Lbs.....	\$30.80	\$30.80

Always sold in Kegs containing 100 Lbs.

TINNED BINDER CANVAS STAPLES

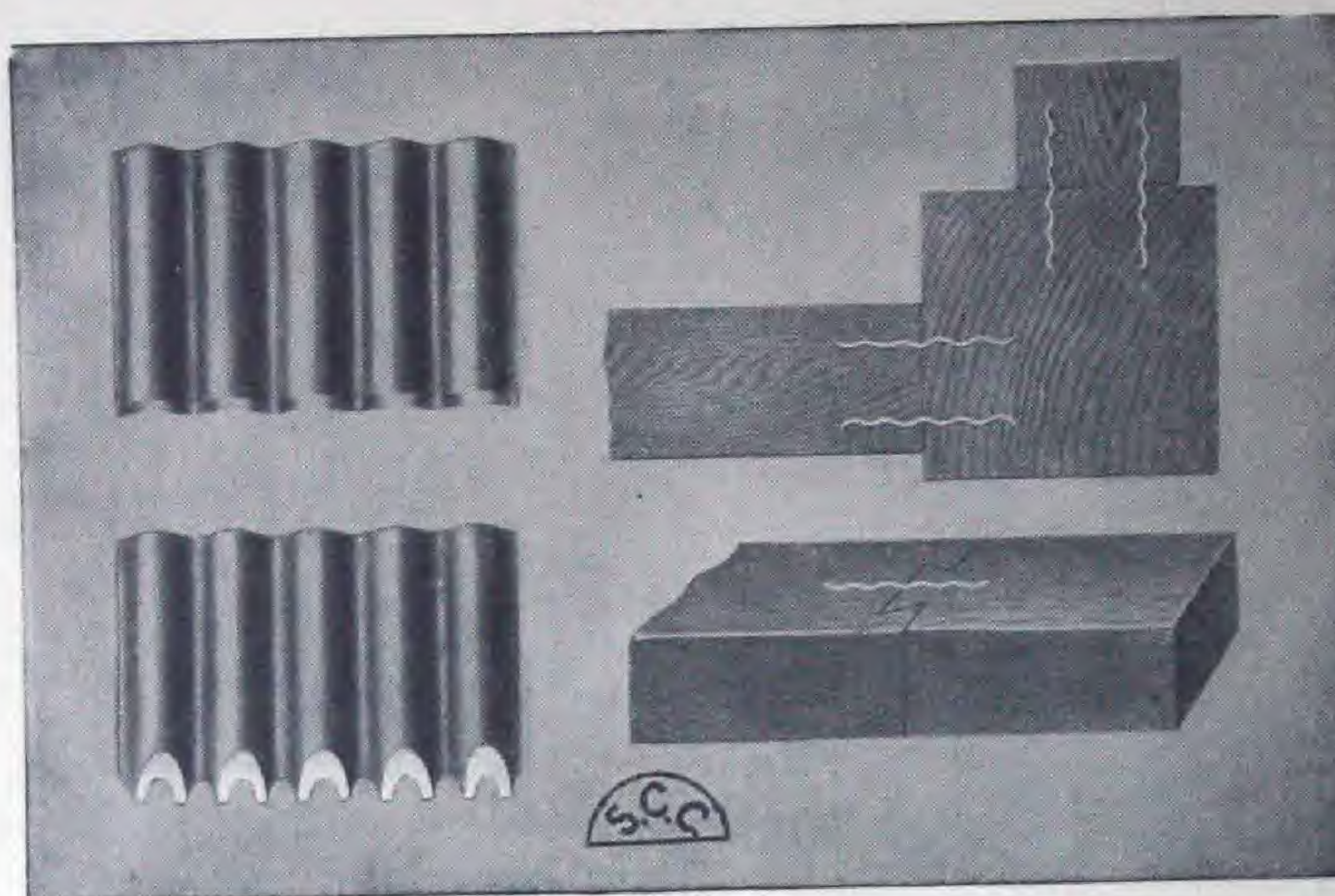


Length, inside 3/4" and 3/8"

Packed in 1/4 pound papers or in bulk.
Price on application.

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21
22
23
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CORRUGATED JOINT FASTENERS



Plain Edge

Saw Edge

Made of sheet steel to any depth and with any number of corrugations. These fasteners take the place of dowels and tenons and are strong and inexpensive to use. The plain edge fasteners are used chiefly for hard woods or for driving into the end grain of softwood. The saw edge fasteners are more suitable for softwood when driven across the grain as they cut their way without crushing the wood. Corrugated fasteners are used largely by manufacturers of agricultural implements, carriages, wagons, coffins, furniture, packing cases, picture frames; by pattern makers and the woodworking industries in general.



Prices on application.

Plain or Saw Edge Corrugated Fasteners, in coils of about ten pounds, measuring 18" diameter, for use on Automatic Machines.

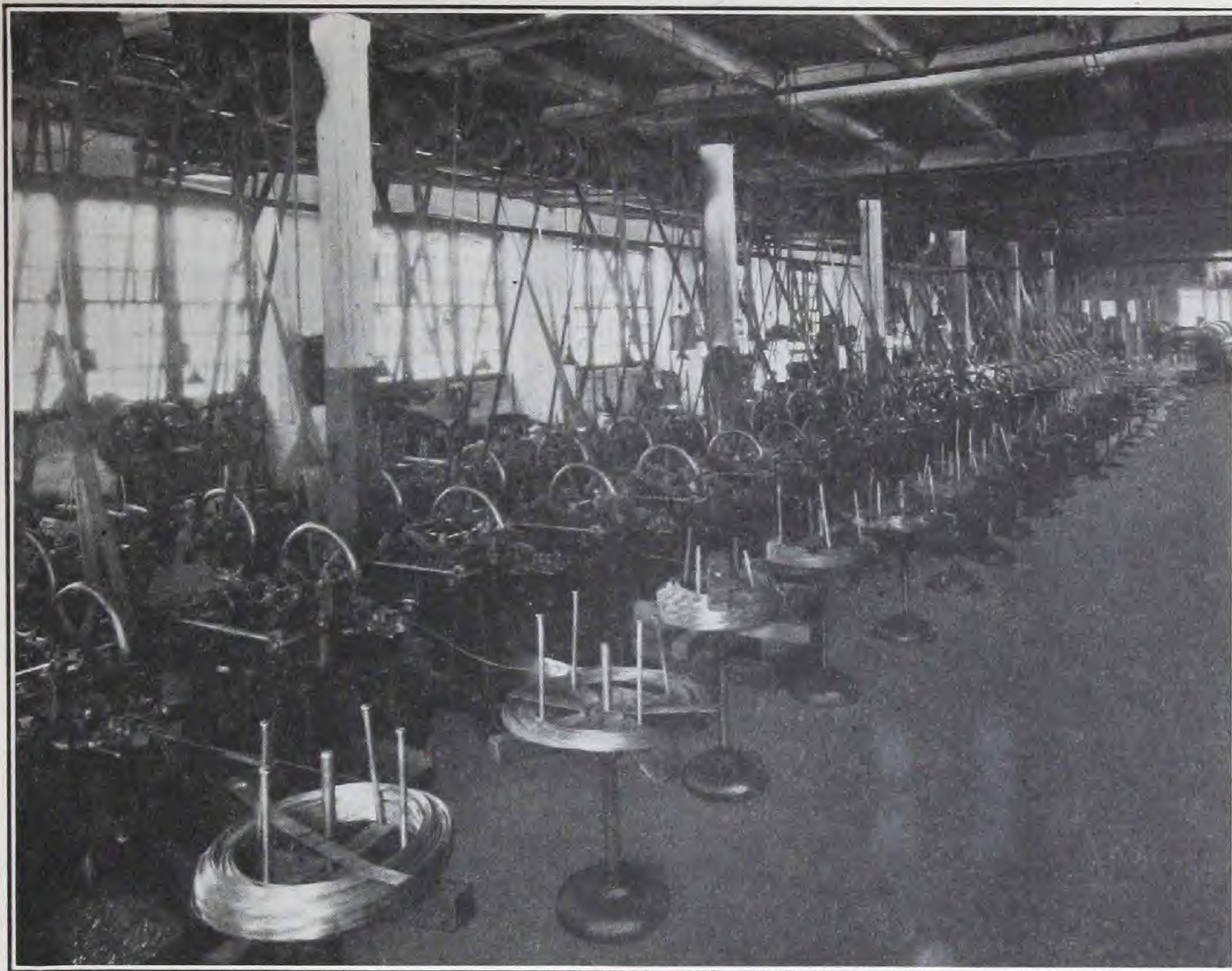
LIST PRICE PER THOUSAND, PLAIN AND SAW EDGE

Number of Corrugations	Inches in Depth						
	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1
No. 2.....	\$0.45	\$0.55	\$0.60	\$0.80	\$0.90	\$1.00	\$1.15
" 3.....	.60	.75	.85	1.00	1.15	1.35	1.45
" 4.....	.75	.95	1.05	1.30	1.45	1.75	1.85
" 5.....	.90	1.20	1.30	1.70	1.85	2.20	2.40
" 6.....	1.10	1.40	1.50	1.85	2.15	2.55	2.85
" 7.....	1.30	1.60	1.80	2.20	2.50	3.00	3.35

Packages contain 250 Fasteners each. In ordering give depth and number of corrugations: as 1/4 inch No. 4, etc.



NAILS



Section of the Wire Nail Department at Canada Works

Quality raw material and scientific care in manufacture are requisites of all Wire Nails produced by this Company.

The primary value of a Nail lies in the quality of the Steel from which it is made, the drawing of the Wire, and the correct design, so that it may be most suitable for the particular class of work for which it is to be used. Nails of poor quality or careless workmanship can easily spoil a job. It is unnecessary to take such risks when the best are available at no extra cost.

This Company, controlling as it does every process of manufacture from the Ore to the finished product, is naturally in the leading position to supply Nails of superior quality and workmanship, and to give unequalled service.

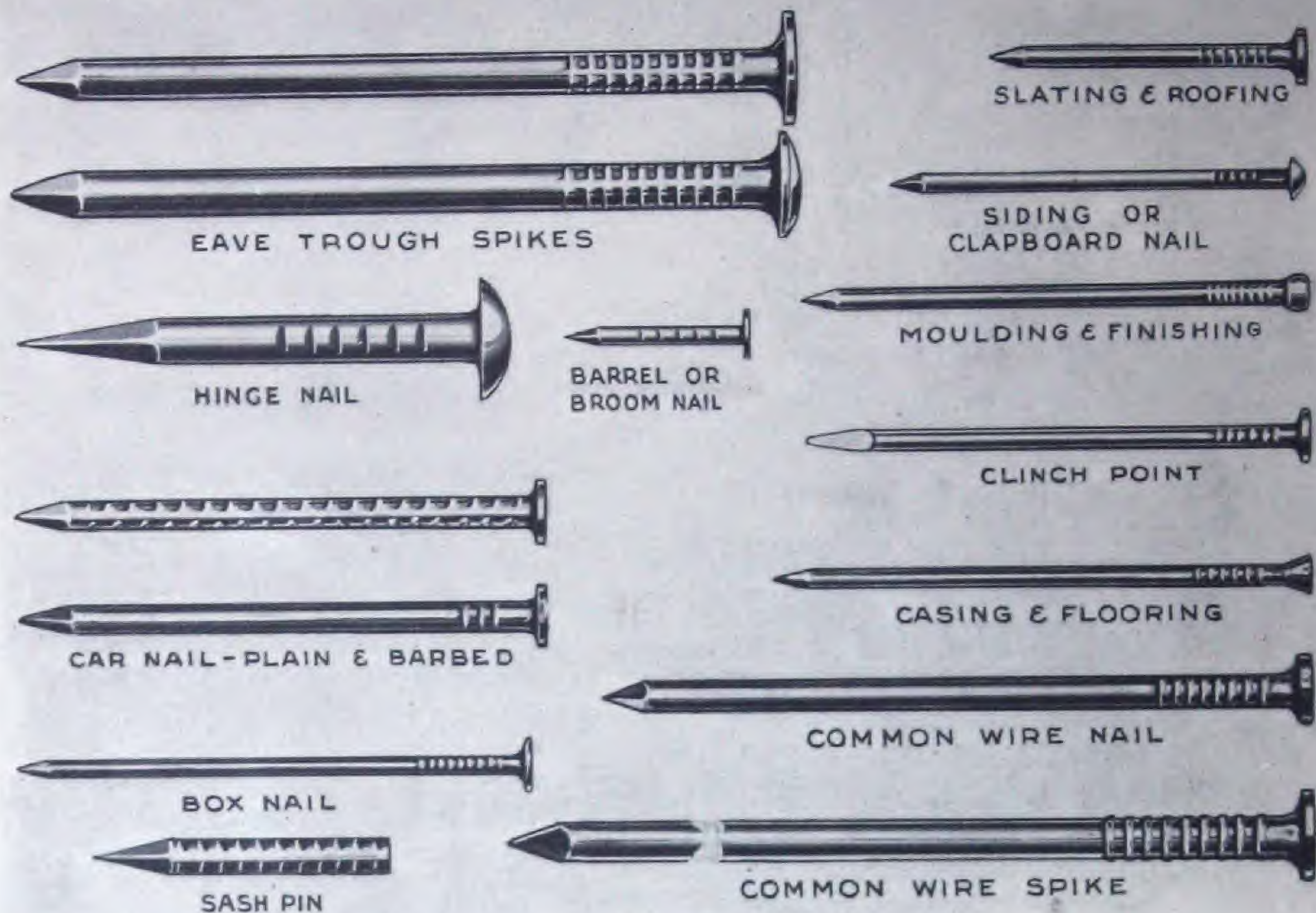
We have four plants: located at Hamilton, Montreal, Lachine and London—manufacturing Wire and Cut Nails in a full range of styles and sizes. Sizes range from $\frac{3}{16}$ " x 22 gauge, counting approximately 30,400 to the pound, to 12" x $\frac{3}{8}$ " diameter, counting 3 to the pound.

Stelco Nails are packed in wooden kegs made from selected stock. These kegs are reinforced top and bottom with beaded steel hoops and with two twisted wire hoops at the bilge. Packing is done automatically by special equipment, resulting in the use of much smaller kegs than were formerly required, and full weight one hundred pounds net in each keg.



WIRE NAILS—Cont'd

STANDARD STEEL WIRE NAILS



Sash Pins are also supplied pointed on both ends.

APPROXIMATE NUMBER OF WIRE NAILS PER POUND

	LENGTH																									
Steel Wire Gauge	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/8	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/2	4	4 1/2	5	6	7	8	9	10
3/8								29	26	23	20	17	15	15	12	11	11	8.9	7.9	7.1	6.4	5.2	4.5	4.0	3.4	3.2
1/4								43	38	34	29	25	22	20	18	16	15	13	11	10	9.0	7.6	6.5	5.7	5.0	4.5
1								47	44	40	34	29	26	23	21	20	18	16	14	12	11	9.3	8.0	7.0	6.3	5.7
2								60	54	48	41	35	31	28	25	23	21	18	16	14	13	11	9.3	8.1	7.2	6.6
3								67	60	55	47	41	36	32	29	27	25	21	18	16	15	12	11	9.4	8.3	7.6
4								81	74	66	55	48	41	37	34	31	29	25	22	20	18	15	13	11	9.8	8.9
5								90	81	74	61	52	45	41	38	35	32	28	24	22	21	18	16	14	12	12
6				213	174	149	128	113	101	91	76	65	58	52	47	43	39	34	29	26	24	20	18	16	15	13
7				250	205	174	148	132	120	110	92	78	70	61	55	51	47	40	35	31	28	24	19	18	16	14
8				272	238	198	174	153	139	126	106	93	82	74	66	61	56	48	42	38	34	28	24	21	19	17
9				348	286	238	213	185	170	152	128	112	99	87	79	71	67	58	50	45	41	34	29	25	23	21
10				469	373	320	277	242	216	196	165	142	124	111	100	91	84	71	62	55	49	42	36	31	27	25
11				510	417	366	323	285	254	233	200	171	149	136	122	111	103	87	77	69	61	52	44	39	35	31
12				740	603	511	442	397	351	327	268	229	204	182	161	149	137	118	103	95	87	71	63	56	50	45
13			1356	1017	802	688	590	508	458	412	348	297	260	232	209	190	175	153	138	123	110	93				
14		2293	1664	1290	1037	863	765	667	586	536	459	398	350	312	278	256	233	201	176	157	140	117				
15		2899	2213	1619	1316	1132	971	869	787	694	578	501	437	390	351	317	290	246	220	196	177	145				
16		3932	2720	2142	1708	1414	1229	1099	973	872	739	635	553	496	452	410	370	318	277	248	226					
17		5316	3890	2700	2306	1904	1581	1409	1253	1139	956	831	746	666	590	532	486	418	360	322	295					
18		7520	5072	3824	3130	2608	2248	1976	1760	1590	1338	1150	996	890	820	740	680	585	507	448	412					
19		9920	6860	5075	4132	3508	2816	2556	2284	2096	1772	1590	1390	1205	1060	970	895	800								
20	18620	14050	9432	7164	5686	4795	4230	3596	3225	2893	2412	2070	1810	1620	1450	1315	1215	1035								
21	23260	17252	12000	8920	7232	6052	5272	4576	4020	3640	3040	2665	2310	2020	1830											
22	28528	21508	14676	11776	9276	7672																				
23	35864	27039	18026	13519	10815	9013																				
24	44936	34018	22678	17008	13607	11339																				
25	57357	43243	28828	21622	17297	14414																				

These approximate numbers are an Average only, and the figures given may be varied either way, by changes in the dimensions of the heads or points. Brads and no-head nails will run more to the pound than table shows, and large or thick-headed nails will run less.



WIRE NAILS—Cont'd

STANDARD STEEL WIRE NAILS

List of Extras per 100 lbs. Over Base for Nails in Kegs
Re-issued February 1st, 1928

Size.....	2d	3d fine	3d	4d	5d	6d	7d	8d	9d	10d	12d	16d	20d	30d	40d	50d	60d
Length in Inches.....	1	1 1/8	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	4	4 1/2	5	5 1/2	6
Common Ge. 15 15 14 13 12 12 11 10 10 9 9 7 6 5 4 3 2 Extra over Base 1.65 1.60 1.15 .80 .75 .60 .55 .50 .45 .40 .35 .30 .25 .25 .25 .25 .25																	
Moulding Ge. 16 16 15 14 13 12 12 11 11 10 9 8 7 6 5 4 3 Extra over Base 1.90 1.80 1.40 1.05 1.00 .85 .80 .75 .70 .65 .60 .55 .50 .50 .50 .50 .50																	
Finishing Ge. 17 17 16 15 14 13 13 12 12 11 11 10 9 9 8 7 Extra over Base 2.25 2.05 1.65 1.45 1.35 1.10 1.05 1.00 .95 .90 .85 .80 .75 .75 .75 .75 .75																	
Casing Ge. 17 17 16 15 14 13 13 12 12 11 11 10 9 9 8 8 Extra over Base 2.00 2.00 1.65 1.30 1.25 1.10 1.05 .80 .80 .70 .65 .60 .55 .40 .40 .40 .40																	
Flooring Ge. 14 14 13 13 12 12 11 10 10 9 9 8 7 7 6 6 Extra over Base 1.75 1.75 1.40 1.15 1.15 1.05 1.05 .90 .90 .85 .80 .75 .70 .65 .65 .65 .65																	
Clinch Ge. 14 14 13 13 12 12 11 10 10 9 9 8 7 7 6 6 Extra over Base 1.75 1.75 1.40 1.15 1.15 1.05 1.05 .90 .90 .85 .80 .75 .70 .65 .65 .65 .65																	
Box Ge. 16 16 15 14 14 13 13 12 12 11 11 10 9 9 8 6 4 Extra over Base 2.20 2.15 1.40 1.05 1.00 .85 .80 .55 .55 .45 .40 .35 .30 .30 .25 .25 .25																	
Light Car Ge. 12 12 10 10 10 9 9 8 8 7 7 6 6 6 5 4 4 Extra over Base 1.95 .75 .70 .60 .50 .50 .45 .40 .30 .25 .25 .25 .25 .25 .25 .25 .25																	
Heavy Car Ge. 10 10 9 9 9 8 8 7 7 6 6 5 5 5 4 3 3 Extra over Base .80 .70 .65 .60 .50 .50 .45 .35 .35 .25 .25 .25 .25 .25 .25 .25 .25																	
Siding or Clapboard Ge. 12 12 12 11 11 11 11 10 10 9 9 8 8 8 7 7 Extra over Base 1.00 .85 .80 .55 .55 .55 .45 .45 .45 .45 .45 .45 .45 .45 .45 .45 .45																	
Hinge Nails, Diamond Pt. Ge. 6 6 3,4 or 6 3,4 or 6 3 or 4 3 or 4 3 or 4 3 or 4 Extra over Base Csk. Head. 1.40 1.30 1.15 1.10 1.10 1.10 1.05 1.05																	
Slating Ge. 12 12 11 11 10 10 10 10 10 9 9 8 8 8 7 7 Extra over Base 1.45 1.35 1.20 1.10 1.00 .90 .90 .90 .90 .90 .90 .90 .90 .90 .90 .90																	
Roofing Ge. 12 12 11 11 10 10 10 10 10 9 9 8 8 8 7 7 Extra over Base 1.20 1.10 .95 .80 .75 .65 .65 .65 .65 .65 .65 .65 .65 .65 .65 .65 .65																	
Barrel or Broom Ge. 14 14 14 13 13 13 13 13 13 12 12 12 12 12 12 12 Extra over Base 1.75 1.65 1.40 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05																	
Sash Pins Ge. 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 Extra over Base 2.00 2.00 1.75 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50																	
Common Spikes, Dia- } 3 x 6 3 1/4 x 6 3 1/2 x 5 4 x 3 4 1/2 x 3 5 x 2 5 1/2 x 2 6 x 1 7 x 1 8 x 0 9 x 0 10 x 00 12 x 00 mond Pt. Flat Head } Extra over Base .40 .35 .30 .25 .25 .25 .25 .25 .25 .25 .35 .35 .45 .45																	

Pennyweight sizes shown for reference only. All orders will be entered and invoiced in inches

Extras for Special Wire Nails and Special Gauges

EAVETROUGH SPIKES

5 inch and longer x 3, 4, and 5 } Flat head, 50c. per 100 lbs.
gauge—over same length com- } Oval or round head, 75c. per
mon wire nails. } 100 lbs.

OTHER EXTRAS NET

Barbing.....\$.25 per 100 lbs.
Annealing......25 "
Special Heads......25 "
Special Points......25 "
Blued or Coated......35 "
Packing in 25 and 50 lb. boxes.....1.00 "
Galvanizing, cadmium plating, tinning, coppering
and brass plating.....On application.
Base price.....On application.

SPECIAL GAUGE WIRE NAILS

Additional extras applying to F. H. Common Wire Nails only, in quantities of not less than 100 lbs. To be added to extras shown for Standard wire nails of the same length.

1 & 1 1/8 x 12—13—14	
1 1/4 x 11—12—13	
1 1/2 x 11—12—14	
1 3/4 x 10—11—13—14	
2 x 10—11—13	
2 1/4 x 9—10—12—13	
2 1/2 x 8—9—11—12	
2 3/4 x 8—9—11	
3 x 6—7—8—10—11	
3 1/2 x 5—6—8—9—10	
4 x 4—5—7—8—9	
4 1/2 x 4—6—7—8—9	
5 x 3—5—6—7—8	
5 1/2 x 4—6 : 6 x 3—4	
1 1/4 x 16.....	50c. per 100 lbs.
2 x 14.....	"
1 3/4 x 15.....	75c. per 100 lbs.
2 1/2 x 13— 2 3/4 x 12	"

All other sizes and gauges charged on Miscellaneous List

WIRE NAILS—Cont'd

BERRY BOX NAILS



Length Inches	S.W.G. No.	Approximate Number to a Pound	Advance over Base per 100 lbs.
3/4	16	1414	\$2.80
3/4	17	1904	3.00
7/8	16	1229	2.55
7/8	17	1581	2.75
1	16	1099	2.35
1	17	1409	2.55
1 1/8	16	973	2.35
1 1/8	17	1253	2.50
1 1/4	16	872	2.25
1 1/4	17	1139	2.45

For other Net Extras see Standard Wire Nail List.

SHINGLE NAILS



Size	Length Inches	S.W.G. No.	Approximate Number per Pound	Advance over Base per 100 lbs.
	1 1/4	13	412	\$1.40
	1 1/4	14	536	1.15
	1 1/2	12	268	1.05
	1 3/4	12	229	.75
	2	12	204	.65

For other Net Extras see Standard Wire Nail List.

SHINGLE NAILS SHINGLERITE BRAND



Size	Length Inches	S.W.G. No.	Approximate No. to a Pound	Advance over Base per 100 lbs.
	1 1/8	11 1/2	340	Prices on Application
	1 1/8	12 1/2	444	
	1 1/4	11 1/2	317	
	1 1/4	12 1/2	400	
	1 1/2	11 1/2	260	
	1 1/2	12 1/2	338	

Shinglerite nails are designed for the purpose of fastening shingles. They have a shoulder under the head and are hot galvanized, both of these points giving increased security and holding power.

Packed in 100 lb. Kegs.

STERILIZED LATH NAILS



Size	Length Inches	S.W.G. No.	Approximate No. to Pound	Advance over base price
2d	1	16	1099	\$2.20
2d	1	17	1409	2.40
3d	1 1/8	15	787	1.60
3d	1 1/8	17	1253	2.15

The process we employ for sterilizing and blueing wire nails makes it perfectly safe for a lather to follow the common practice of putting the nails in his mouth.

These nails are packed in paper-lined kegs for the purpose of keeping them clean and sanitary.

An extra charge of 35c. per 100 pounds is made for blueing these special nails.

For other Net Extras see Standard Wire Nail List.

PLASTER BOARD NAILS



Length Inches	S.W.G. No.	Diameter of Head Inches	Approximate No. per Pound
1 1/4	11	7/16	207
1 1/2	11	7/16	182

Prices on Application.

WALLBOARD NAILS

Due to the number of branded lines of wallboard on the market we have experienced a number of requests asking us to recommend a particular type of nail for attaching. In several instances wallboard manufacturers have co-operated with us and after careful selection arrangements have been made to supply nails conforming to the requirements as approved and recommended by these manufacturers.

Where these arrangements have been made the nails are named after the wallboard manufacturer's brand and kegs are stencilled with the brand name on them.

Nails are supplied in various finishes bright, blued, cadmium plated or hot dipped zinc coated (hot galvanized) in accordance with standard approved.

Your enquiry should state brand name of wallboard and also mention whether nails are for attaching wallboard over old plaster, to side walls or for ceiling work.



WIRE NAILS—Cont'd.

MISCELLANEOUS WIRE NAIL LIST

Price per Pound applying to all Nails except Standard
Reissued May 20th, 1925

Length in Inches	1/4	3/8	1/2	5/8	3/4	7/8	1	1 1/8	1 1/4 1 3/8	1 1/2	1 3/4	2 2 1/4	2 1/2 2 3/4	3 3 1/4	3 1/2 4
Gauge 3....	Figures shown in heavy type indicate best selling sizes.														\$.25
4....	Nails heavier than listed at special net prices according to quantity.													\$.25	.25
5....	Nails half gauge take list price of same length in next finer gauge.											\$.27	\$.26	.25	.25
6....										\$.29	\$.28	.27	.26	.25	.25
7....									\$.29	.29	.28	.27	.26	.25	.25
8....							\$.30	\$.30	.29	.29	.28	.27	.26	.25	.25
9....						\$.33	.30	.30	.29	.29	.28	.27	.26	.25	.25
10....					\$.36	.33	.30	.30	.29	.29	.28	.27	.26	.25	.25
11....					.36	.33	.30	.30	.29	.29	.28	.28	.27	.26	.26
12....					.36	.33	.30	.30	.29	.29	.28	.28	.27	.27	
13....					.38	.34	.31	.31	.30	.29	.28	.28	.28		
14....				\$.43	.38	.35	.32	.32	.31	.30	.29	.29			
15....				.45	.42	.36	.33	.32	.32	.31	.30				
16....		\$.55		.50	.43	.39	.36	.35	.34	.33					
17....			.60	.52	.46	.43	.40	.40	.39						
18....		\$.80	.65	.58	.52	.45	.43	.43							
19....	\$1.00	.90	.75	.65	.60										
20....	1.25	1.00	.85	.75	.70										
21....	1.55	1.25													

Other net extras.

Discounts on Application.

Barbing.....	\$.25 per 100 lbs.
Annealing.....	.25 "
Special Heads.....	.25 "
Special Points.....	.25 "

Headless.....	\$.50 per 100 lbs.
Blued or Coated.....	.35 "
Packing in 25 and 50 pound boxes.....	1.00 "
Packing in 1 pound papers.....	2.00 "

Note.—An additional net extra of \$2.00 per 100 lbs. will be charged on all nails on Miscellaneous List, when ordered in lots of less than 100 lbs. of one size; such orders will be subject to mill acceptance.

Extras for galvanizing, cadmium plating, tinning, coppering or brass plating, on application.

BASKET NAILS



Length Inches	S.W.G. No.	Advance over Base Price per 100 Pounds
5/8	17	\$3.00
3/4	17	2.50
7/8	17	2.50
1	17	2.00
1 1/8	17	2.00
1 1/4	16	1.65

CIGAR BOX NAILS



Cigar Box Nails are made with short diamond points, or, if so ordered, with short round point. Bright, barbed or smooth, made in sizes 1/2, 5/8, 3/4, 7/8 and 1 inch, in S.W.G. No. 18, 19, or 20. Packed in kegs, 25-lb. boxes, and in 1-lb., 5-lb., or 10-lb. packages. Sold on the "Miscellaneous Wire Nail List."

We supply "Hand Picked" Cigar Box Nails for machine drive at a slight extra charge.

REED AND RATTAN NAILS



Made with a long, sharp point specially for Reed and Rattan Furniture manufacturers.

Length Inches	S.W.G. No.	Approximate Number per Pound
5/8	18	3130
3/4	18	2608
1	17	1409
1 1/4	17	1139

Prices on Application.

Packed in Kegs 100 lbs.

WEATHER STRIP NAILS



Long Diamond Point
for Fibre



Short Diamond Point
for Metal

Length Inches	S.W.G. No.	Approximate Number per Pound
5/8	17	2306
3/4	17	1904

Made to order only.

Prices on Application.

Supplied bright steel, brass or copper, also brass plated, copper plated, hot dip galvanized, electro-galvanized, tinned and cadmium plated.

Packed in Kegs 100 lbs., also by count in envelopes.

WIRE NAILS—Cont'd

FOUNDRIY NAILS



This nail is driven flush with the face of the matrix or cavity to prevent the flow of molten metal from injuring the mould.

Length Inches	S.W.G. No.	Diameter of Head Inches	Approximate No. per Pound
1½	9	1½	131
2	9	1½	101
2½	9	1½	81
3	9	1½	69
4	9	1½	52
5	9	1½	43
6	9	1½	36

Prices on Application.

MOLDOCHIL NAILS



Large Head Standard



Large Head Slim Blade



Small Head Standard

Moldochil Nails serve as a very effective chill to hot metal. When pouring steel, semi-steel or malleable iron castings they are a means by which shrinkage, blow holes and flaws can be eliminated. No. 1 size is designed especially to be used in round corners of cores.

Style of Head	Small Head		Large Head			
Size Numbers	1	2	6	7	8	9
Length in Inches . .	1½	2	2½	2¾	2¾	2¾
Approx. No. Standard Head per lb.	110	82	45	44	43	42

Prices on Application.

Packed 150 lbs. in Kegs lined with heavy waterproof paper to prevent rust or dampness.

LARGE HEAD CANADIAN ROOFING NAILS



Made of Copper Bearing Steel Wire
Also supplied barbed when requested.

Extras per 100 Lbs.

Diam. of Head	7/16 inches			
	Gauge		Approx. No. per Lb.	
Length	10	11	10	11
¾	\$1.85	\$2.10	278	292
7/8	1.75	2.00	248	272
1	1.65	1.90	232	207
1¼	1.55	1.80	186	182
1½	1.50	1.75	152	157
1¾	1.45	1.70	142	

Supplied bright, hot dip galvanized, electro-galvanized, or cadmium plated.

WIRE NAIL FINISHES

Blued

The blueing process is particularly desirable in small sizes of nails that are to be driven by machinery. The nail is sterilized thoroughly and the smoothness of the finish improved.

A nominal charge is made for blueing and is embodied in the Standard and Miscellaneous wire nail lists.

Cadmium Plated

Cadmium plating can be furnished for those who prefer this finish. These nails are rust proof and have a somewhat smoother finish than hot galvanizing.

An extra is charged, prices will be quoted on application.

Cement Coated

Nails are coated with cement while the nail is hot, by a process which covers all parts of the nail. A coated nail has great holding power.

An extra charge is made, as in the case of Blued Nails.

Copper and Brass Plated

It is sometimes desirable that a Standard Nail be Copper or Brass Plated.

An extra charge is made for this work and prices will be quoted on application.

Electro-Galvanized

Electro-galvanized Nails. Electro galvanizing finish can be applied to any style of nail when specified. Extra on application.

Hot Dip Galvanized

The process of galvanizing employed by us enables us to deliver to the trade galvanized nails which are thoroughly protected by a heavy and uniform coating of pure spelter. The coat is applied by the hot process after the nail is made, and covers head, point and shank. We will furnish any style of nail galvanized.

An extra charge is made for galvanizing wire nails, which will be quoted on application.



WIRE NAILS—*Cont'd*



STELCO FELT ROOFING NAILS



Recommended by prepared roofing manufacturers as conforming to all requirements for the correct and permanent laying of Asphalt and Asbestos Roll Roofings and Shingles, both smooth and slate finish.

Stelco Felt Roofing Nails are the outcome of our long experience manufacturing roofing nails. Every requirement has been carefully studied and results obtained which produce a nail that is ideally suited for its purpose.

Copper Bearing Steel. The wire used in making Stelco Felt Roofing Nails is drawn from steel which has a strong copper content, giving the nails a rust-resisting quality which guarantees a life longer than the life of the roofing material itself.

Extra Large Diameter of Heads. The heads of these nails are extra large in diameter, giving the maximum in bearing surface, and as care is taken to make all heads uniformly round and well centred the roofing is held securely and without danger of puncture.

Checkered Heads. The checkered head prevents the hammer from slipping off the nail, ensuring a straight even blow and thus eliminating bending, loss of nails or damage to roofing.

Gauge of Shanks. The diameter of the shank is planned to give the right amount of stiffness to drive correctly, the life to last longer than the material, yet not too heavy to split the wood in which it is being driven.

Long Sharp Points. The points are long and sharp and can be pressed into position with the thumb quite easily, therefore laying can be done at a considerable saving in time and expense.

Finish. Stelco Felt Roofing Nails are furnished bright, hot dip zinc coated (hot galvanized), electro-galvanized and cadmium plated. When ordering make sure you mention the finish you require.

Sizes. Standard sizes carried in stock:—

1" x 10 gauge running approximately 185 nails to a pound.
1" x 11 " " " " 228 " " "

Packed 100 pounds in a keg.

Longer or shorter lengths can also be supplied when required.

Samples and Prices furnished on application



WIRE NAILS—Cont'd

BRASS AND COPPER WIRE NAILS

Standard wire nails, clinch nails, box nails, roofing nails, slating nails and other shapes are sometimes required made of copper or brass. The minimum quantity that can be made at a reasonable price is 100 pounds. On receipt of information as to style of nail wanted and quantity required we will quote prices.

ESCUTCHEON PINS



Round Head and Headless, Steel and Brass

List Price per pound in bulk or 1-lb. papers

STEEL

S.W.G. No.	Length, Inches											
	$\frac{3}{16}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2
10.....			\$0.35	\$0.30	\$0.28	\$0.26	\$0.24	\$0.23	\$0.21	\$0.20	\$0.19	\$0.18
11.....			.40	.35	.32	.30	.28	.26	.23	.22	.21	.20
12.....			.50	.42	.37	.34	.32	.30	.26	.24	.23	.22
13.....			.55	.46	.41	.37	.34	.32	.28	.26	....	....
14.....			.60	.50	.45	.43	.38	.35	.31	.29	....	....
15.....		\$0.85	.70	.55	.50	.45	.41	.38	.34	.32		
16.....		.95	.75	.60	.53	.48	.45	.42	.38	.36		
17.....		1.05	.85	.70	.63	.57	.52	.49	.43	.40		
18.....		1.25	1.00	.90	.80	.75	.70	.65				
19.....		1.50	1.15	1.00	.90	.80	.75	.70				
20.....	\$2.00	1.70	1.50	1.30	1.15	1.00						
21.....	2.15	1.95	1.75	1.60								
22.....	2.40	2.15	1.90	1.70								
24.....	3.00	2.50	2.10	1.85								

BRASS

S.W.G. No.	Length, Inches											
	$\frac{3}{16}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2
10.....			\$0.85	\$0.80	\$0.78	\$0.76	\$0.75	\$0.74	\$0.72	\$0.71	\$0.70	\$0.69
11.....			.95	.87	.84	.82	.80	.78	.76	.75	.74	.73
12.....		\$1.15	.98	.93	.90	.87	.85	.83	.79	.77	.76	.75
13.....		1.20	1.03	.98	.93	.90	.87	.84	.80	.78		
14.....	\$1.50	1.25	1.05	1.00	.96	.92	.88	.85	.81	.80		
15.....	1.60	1.35	1.15	1.07	1.00	.95	.92	.90	.86	.84		
16.....	1.75	1.45	1.20	1.10	1.03	.99	.96	.94	.90	.88		
17.....	2.00	1.60	1.40	1.25	1.17	1.10	1.04	1.00	.96	.94		
18.....	2.50	1.90	1.50	1.35	1.27	1.20	1.15	1.10				
19.....	2.75	2.15	1.75	1.60	1.45	1.35	1.30	1.25				
20.....	3.00	2.35	2.10	1.95	1.80	1.65						
21.....	3.25	2.75	2.50	2.30								
22.....	3.50	3.15	2.85	2.60								
24.....	4.00	3.50	3.10	2.85								

PLATING OR FINISH

(Brass, Copper, Nickel Plated, Tinned or Japanned) lots of 100 pounds of an item 6c net per pound; less than 100 pounds add 20c to list price before deducting discounts. Minimum charge for plating \$2.00 per item net. Sizes underlined are standard and are usually carried in stock.



CUT NAILS

STANDARD CUT NAILS

*List of Extras per 100 lbs. over base for nails in Kegs except extras covering Clinch Nails and Sharp and Flat Pressed Nails.
Extras include packing in 50 lb. boxes, which is Standard stock package for these nails*

Adopted February 15th, 1930

Size		2-D	3-D fine	3-D	4-D	5-D	6-D	7-D	8-D	9-D	10-D	12-D	16-D	20-D	30-D	40-D	50-D	60-D
Length in Inches		1	1 1/8	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	4	4 1/2	5	5 1/2	6
Common.....		1.75	1.65	1.45	1.00	.75	.60	.55	.50	.50	.40	.35	.30	.25	.25	.25	.25	.25
Fine Blued.....		2.50		2.15														
Casing and Flooring.....				1.70	1.40	1.30	1.00	.75	.65	.65	.45	.40	.35	.30	.30			
Finishing.....		2.50		2.15	1.80	1.75	1.60	1.55	1.30	1.30	1.20	1.15	1.10	1.05	1.05	1.05		
Slating.....		1.75		1.40	1.15	1.10	.95											
Clapboard.....							.85	.80	.65									
Clinch.....		3.50		3.00	2.35	2.35	2.15	2.15	2.00	2.00	1.85	1.85	1.85	1.85	1.85			
Sharp and Flat Pressed.....		4.00		3.50	2.85	2.85	2.65	2.65	2.50	2.50	2.35	2.35	2.35	2.35	2.35			

Galvanizing Extras quoted on application

Pennyweight sizes shown for reference only. All orders will be entered and invoiced in inches

CUT NAILS SOLD ON LIST AND DISCOUNT

ROOFING NAILS

List Prices

Length, inches	List Price per 100 lbs.
7/8"	\$11.50
1" and longer	10.00

BEST BARREL AND COOPERS' NAILS

List Prices

Length, inches	List Price per 100 lbs.
3/4"	\$10.25
7/8"	9.75
1"	9.50
1 1/8"	9.00

BOAT AND DORY NAILS

List Prices

Length, inches	List Price per 100 lbs.
3/4	\$32.00
7/8	30.00
1	28.00
1 1/8	28.00
1 1/4	26.00
1 1/2	24.00
1 3/4	24.00
2	23.00
2 1/4	23.00
2 1/2	22.00
2 3/4	22.00
3 to 6	21.00

Dory nails are supplied 1 1/2" to 3" only.

Galvanizing Extras on application

21
22
23
24
25

CUT NAILS—Cont'd

STANDARD COMMON CUT NAILS



Size d	Length Inches	Approximate Number per Pound	Advance over Base, per 100 Pounds
2d	1	850	<i>See Standard Cut Nail List of Extras.</i>
3d fine	1 1/8	800	
3d	1 1/4	550	
4d	1 1/2	350	
5d	1 3/4	330	
6d	2	180	
7d	2 1/4	140	
8d	2 1/2	100	
9d	2 3/4	80	
10d	3	65	
12d	3 1/4	50	
16d	3 1/2	40	
20d	4	31	
30d	4 1/2	22	
40d	5	18	
50d	5 1/2	14	
60d	6	12	

FINE BLUED CUT NAILS



Size d	Length Inches	Approximate Number per Pound	Advance over Base, per 100 Pounds
2d	1	1000	<i>See Standard Cut Nail List.</i>
3d	1 1/4	800	

CUT CASING AND FLOORING NAILS

Casing



Flooring



Size d	Length Inches	Approximate Number per Pound	Advance over Base, per 100 Pounds
3d	1 1/4	550	<i>See Standard Cut Nail List.</i>
4d	1 1/2	350	
5d	1 3/4	330	
6d	2	180	
7d	2 1/4	140	
8d	2 1/2	100	
9d	2 3/4	80	
10d	3	65	
12d	3 1/4	50	
16d	3 1/2	40	
20d	4	31	
30d	4 1/2	22	

2 1/4 & 2 1/2 BLUED CUT FLOORING BRADS



Size d	Length Inches	Approximate Number per Pound	Advance over Base, per 100 Pounds
7d	2 1/4	79	<i>See Standard Cut Nail List.</i>
8d	2 1/2	60	

CUT FINISHING NAILS



Size d	Length Inches	Approximate Number per Pound	Advance over Base, per 100 Pounds
2d	1	560	<i>See Standard Cut Nail List.</i>
3d	1 1/4	440	
4d	1 1/2	256	
5d	1 3/4	180	
6d	2	140	
7d	2 1/4	88	
8d	2 1/2	80	
9d	2 3/4	69	
10d	3	56	
12d	3 1/4	..	
16d	3 1/2	..	
20d	4	..	
30d	4 1/2	..	
40d	5	..	

CUT CLAPBOARD NAILS



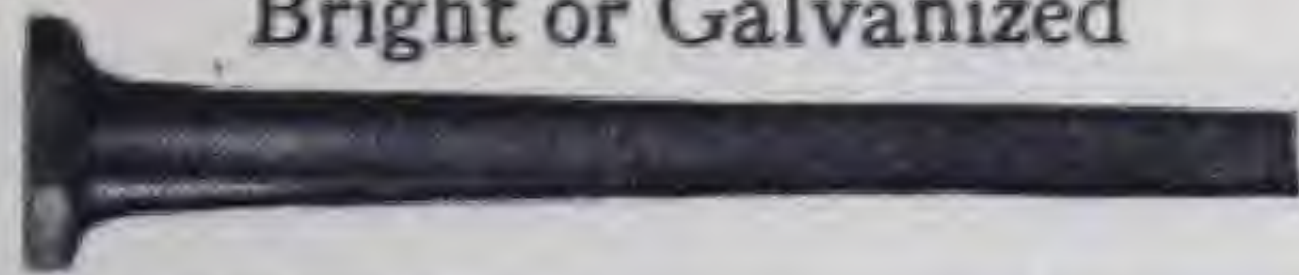
Size d	Length Inches	Approximate Number per Pound	Advance over Base, per 100 Pounds
6d	2	..	<i>See Standard Cut Nail List.</i>
7d	2 1/4	..	
8d	2 1/2	..	



Packed in kegs of 100 Pounds each.

CUT NAILS—Cont'd

CUT SLATING NAILS Bright or Galvanized



Size d	Length Inches	Size d	Length Inches
2d	1	5d	1 3/4
3d	1 1/4	6d	2
4d	1 1/2		

Sold on Standard Cut Nail List.

CUT ROOFING NAILS



Size d	Length Inches	Size d	Length Inches
2d	7/8	4d	1 1/2
3d fine	1	5d	1 3/4
3d	1 1/8	6d	2
	1 1/4		

Supplied Bright or Galvanized. Sold on List and discount.

CUT BARREL NAILS Best Blued or Bright



Length, Inches...	3/4	7/8	1	1 1/8
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Sold on List and discount.

CUT BASKET NAILS Bright or Blued



Length, Inches.....	1/2	5/8	3/4	7/8	1	1 1/8	1 1/4
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Prices on Application.

CUT COOPER'S NAILS Bright or Blued—Made to Clinch



Length, Inches...	3/4	7/8	1	1 1/8
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Sold on List and discount.

CUT SHINGLE NAILS Bright or Galvanized



Length, Inches.....	1 1/4	1 1/2	..
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Prices on Application.

Packed in Kegs of 100 Lbs. unless otherwise noted.

CUT BOAT NAILS Black or Galvanized



Length, Inches....	3/4, 7/8, 1, 1 1/8, 1 1/4, 1 1/2, 1 3/4, 2, 2 1/4, 2 1/2, 2 3/4, 3 to 6.
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Sold on List and discount. Packed in 25 lb. Boxes in stock, also packed to order in 100 lb. Kegs.

CUT DORY NAILS Black or Galvanized



Length, Inches....	1 1/2, 1 3/4, 2, 2 1/4, 2 1/2, 2 3/4, 3.
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Sold on List and discount. Packed in 25 Lb. Boxes in stock, also packed to order in 100 Lb. Kegs.

SHARP AND FLAT PRESSED NAILS



Sharp



Flat

Length, Inches....	1, 1 1/4, 1 1/2, 1 3/4, 2, 2 1/4, 2 1/2, 2 3/4, 3, 3 1/4, 3 1/2.
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Sold on Standard Cut Nail List. Packed in Boxes of 50 Lbs.

CUT CLINCH NAILS



Length, Inches....	1, 1 1/4, 1 1/2, 1 3/4, 2, 2 1/4, 2 1/2, 2 3/4, 3, 3 1/4, 3 1/2.
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Sold on Standard Cut Nail List. Packed in Boxes of 50 Lbs.

SPECIAL CUT NAILS

We are prepared to cut special patterns and sizes of Cut Nails when ordered in sufficient quantities to cover the additional cost of making the necessary dies.

GALVANIZED CUT NAILS

The process of galvanizing employed by us thoroughly protects the nail with a heavy and uniform coating of pure spelter. The coat is applied by the hot process, and covers head, point and shank.

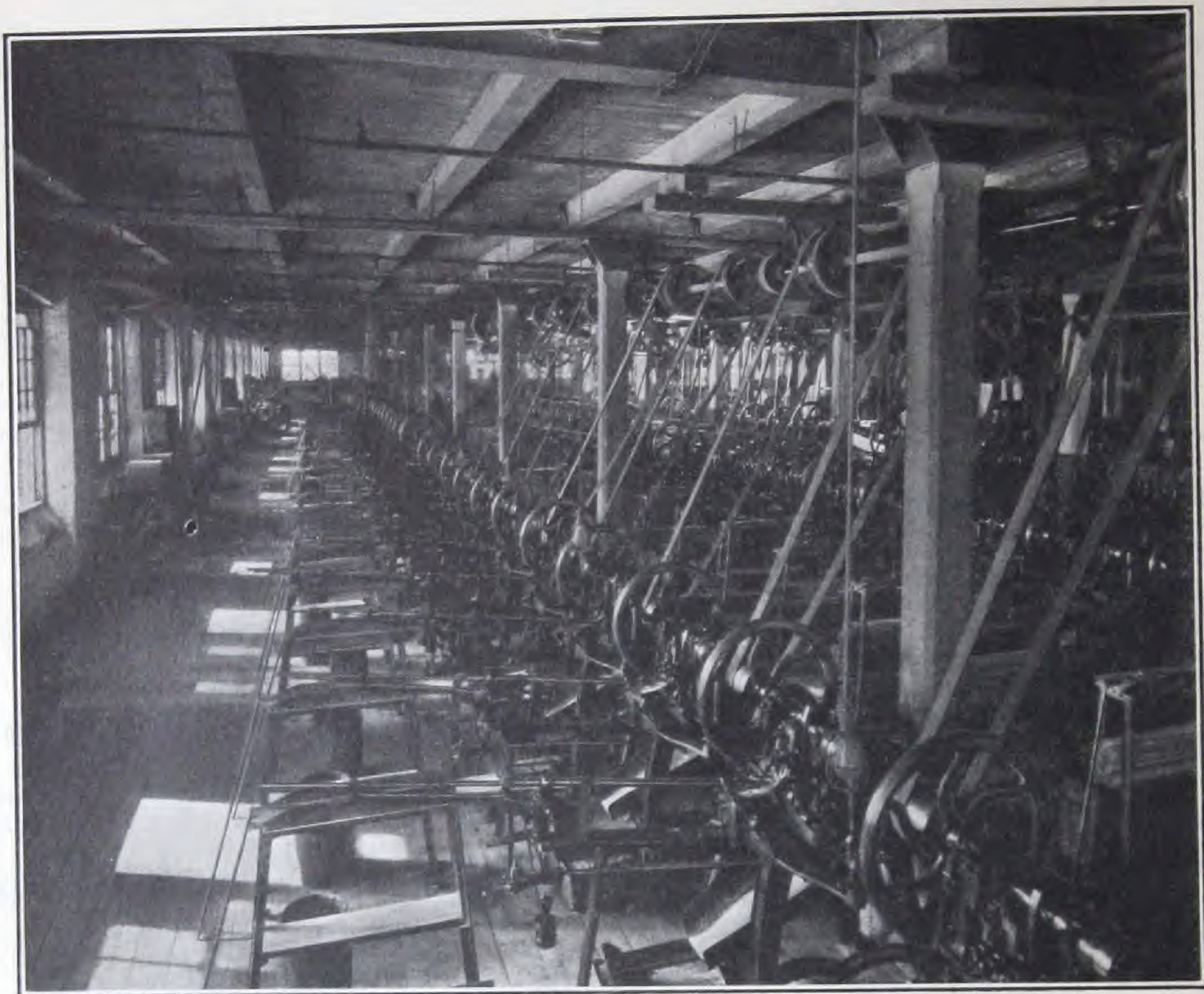
An extra charge is made for galvanizing, which will be quoted on application.

COPPER CUT NAILS

Cut Nails are sometimes required made of copper. The minimum quantity that can be made at a reasonable price is about 100 pounds. On receipt of information as to style of nail and quantity required, we will quote prices.



TACKS



Section of the Cut Tack Department at Canada Works

Our experience as tack manufacturers dates back to the year 1873 when the first of our tack works started operations. We now manufacture tacks at works located at Montreal and Hamilton.

To the average individual tacks mean "just tacks," but when we come to analyze the manufacture of this product we see that it embraces innumerable sizes and styles, each made for a particular purpose and each made from a steel best suited for the work this tack has to do. As we manufacture the steel through all processes in our own plants we are in a position to control its quality and to fully guarantee the uniformity of our products.

There are two distinct types of tacks—Cut Tacks made from steel plate—and Wire Tacks made from wire. We manufacture both kinds and carry a complete stock of all standard tacks, in various styles and sizes. We can offer exceptionally prompt service also on specials.





TACKS—Cont'd
HARDWARE TACK LIST
Adopted March 22, 1927.

TACKS	List Price per Dozen Packages															
	1	1½	2	2½	3	4	6	8	10	12	14	16	18	20	22	24
Half Weight.....oz.																
Cut Tacks—Blued.....			1.05	1.17	1.32	1.53	2.02	2.49	2.96	3.42	3.89	4.44	4.97	5.32	6.11	6.66
Cut Tacks—Tinned.....			1.14	1.28	1.45	1.73	2.29	2.88	3.41	4.01	4.52	5.16	5.78	6.18	7.12	7.74
Carpet Tacks—Blued.....					1.00	1.25	1.76	2.16	2.66	3.11	3.57					
Carpet Tacks—Tinned.....					1.13	1.43	2.03	2.52	3.11	3.65	4.20					
Gimp Tacks—Blued.....			1.08	1.22	1.29	1.52	1.90	2.40	2.93	3.38	3.94					
Gimp Tacks—Tinned.....			1.17	1.33	1.44	1.70	2.20	2.79	3.38	3.96	4.62					

List Price per Pound

In Bulk—100 lb., 50 lb., 25 lb. packages.....	Ounces															
	1	1½	2	2½	3	4	6	8	10	12	14	16	18	20	22	24
Carpet Tacks—Blued.....					.69	.66	.62	.59	.58	.56	.55					
Carpet Tacks—Tinned.....					.81	.78	.74	.71	.70	.68	.67					
Swedes' Cut and Trimmers' Tacks—Blued.....			1.12	.99	.93	.82	.73	.69	.65	.62	.60					
Tacks—Tinned.....			1.24	1.11	1.05	.94	.85	.81	.77	.74	.72					
Upholsterers' Tacks—Blued.....	1.28	1.09	1.06	.98	.80	.76	.71	.67	.65	.61	.60					
Upholsterers' Tacks—Tinned.....	1.40	1.21	1.18	1.10	.92	.88	.83	.79	.77	.73	.72					
Basket Tacks—Blued.....					1.00	.84	.80	.72	.70	.69	.65	List for the above sizes is the same as for 14 oz. tacks				
Basket Tacks—Tinned.....					1.12	.96	.92	.84	.82	.81	.77					
Gimp Tacks—Blued.....			1.15	1.04	.84	.82	.69	.68	.66	.64	.64					
Gimp Tacks—Tinned.....			1.27	1.16	.96	.94	.81	.80	.78	.76	.76					
Lace Tacks—Blued.....				1.06	.98	.88	.84	.76	.73	.70	.70					
Lace Tacks—Tinned.....				1.18	1.10	1.00	.96	.88	.85	.82	.82					
Solid Head Lining Tacks —Japanned.....						.78	.77	.74	.72	.68	.68					
Trunk Tacks, Oval Head—Blued.....							.63	.61	.59	.57	.56					
Oval Head—Tinned.....							.75	.73	.71	.69	.68					
Bill Posters' Tacks—Blued.....				.71	.67	.62	.57	.57	.56	.56	.56					
Bill Posters' Tacks—Tinned.....				.83	.79	.74	.69	.69	.68	.68	.68					

Copper Tacks (All sizes)—Prices Quoted on Application.

Canvas Tacks, Cheese-Box Tacks, Curtain and Shade Tacks, Broom Tacks—Take same List as Upholsterers' Tacks.

Railroad Tacks, Roofing Tacks, Hide Tacks—Same List as Billposters' Tacks.

Looking-glass Tacks, Picture Frame Points—Same List as Lace Tacks.

Truckers' Tacks, Berry-Box Tacks—Same List as Basket Tacks.

Wire Tacks—Same List as corresponding kind of Cut Tacks.

List Price per Pound

Goods sold by Length	Inches									
	4/8	5/8	6/8	7/8	1	1-1/8	1-1/4	1-1/2	1-3/4	2
Clout Nails—Blued.....	.60	.58	.56	.53	.52	....	.49	.47	List for the above lengths is the same as for 1½- inch Nails.	
Clout Nails—Tinned.....	.72	.70	.68	.65	.64	....	.61	.59		
Trunk Nails—Blued.....	.59	.57	.55	.54	.51	....	.50	.49		
Trunk Nails—Tinned.....	.71	.69	.67	.66	.63	....	.62	.61		
Basket Nails										
Chair Nails } Bright or Blued....	....	.64	.62	.59	.57	....	.54	.53		
Cigar Box Nails } Tinned.....	....	.76	.74	.71	.69	....	.66	.65		
Copper Nails (All Sizes).....	Price quoted on application.									

Net Extras for Packing

1 lb., 5 lb., 10 lb. Pprs.....	\$2.00 per 100 lbs. Net.
½ lb.....	3.00 per 100 lbs. Net.
¼ lb.....	4.00 per 100 lbs. Net.

Brass Plating, Copper Plating, Japanning, Galvanizing—Prices quoted on application.

Length of Tacks and Corresponding Sizes in Ounces

Inches	3/16	7/32	1/4	5/16	3/8	7/16	1/2	9/16	5/8	11/16	3/4	13/16	7/8	15/16	1	1-1/8
Lace Tacks }.....	..	..	..	2	2½	3	4	6	8	..	..	..	..	..	..	..
Gimp Tacks }.....	..	..	..	..	..	..	4	..	8	..	12	..	16	..	..	..
Picture Frame Points	..	..	..	..	..	..	4	..	8	..	12	..	16	..	..	..
All other Hardware Tacks.....	1	1½	2	2½	3	4	6	8	10	12	14	16	18	20	22	24

TACKS—Cont'd

CARPET TACKS

In display cartons

BLUED

TINNED



Cut carpet tacks are put up in coloured cartons for counter display and are arranged in assortments as follows:—

HALF GROSS DISPLAY CONTAINERS

Assortment Number 6810 Blued

1 dozen	2 oz. papers	No. 6— $\frac{1}{2}$ "
4 "	2 "	No. 8— $\frac{9}{16}$ "
1 "	2 "	No. 10— $\frac{5}{8}$ "

Assortment Number 6810 Tinned

1 dozen	2 "	No. 6— $\frac{1}{2}$ "
4 "	2 "	No. 8— $\frac{9}{16}$ "
1 "	2 "	No. 10— $\frac{5}{8}$ "

Assortment Number 468 Blued

dozen	2 oz. papers	No. 4— $\frac{7}{16}$ "
"	2 "	No. 6— $\frac{1}{2}$ "
"	2 "	No. 8— $\frac{9}{16}$ "

All assortments packed 8 cartons to a case

COPPER SCREEN TACKS

In display cartons



This display attracts sales at all seasons of the year. In addition to their purpose for fastening screening, they have also proven very useful for tacking oilcloth on kitchen tables, fastening weather stripping and putting up outdoor signs. Cartons and packages are printed in two colors.

Contents of Display Cartons

Each carton contains 36-two ounce papers No. 4— $\frac{7}{16}$ ", a total of $4\frac{1}{2}$ pounds. Eight of these cartons are packed in a case.

DOUBLE POINTED CARPET TACKS

See under Staples

TACK FINISHES

Tacks can be furnished in a variety of finishes as follows:—Bright, Blued, Cadmium Plated, Tinned, Electro Galvanized, Hot Galvanized, Brass and Copper Plated, Nickel Plated, Lacquered and Washed. Details will be given on application.

CONTENTS OF FULL CASES OF TACKS SOLD IN DOZENS

Cut Tacks, Large Head Carpet and Gimp Tacks



Ounces	1	1½	2	2½	3	4	6	8	10	12	14	16	18	20	22	24
Dozen Papers	48	48	48	48	48	48	48	48	30	30	16	16	16	16	16	16

TACKS

CUT TACKS

Blued or Tinned



Ounces	Length Inches	Ounces	Length Inches
2	$\frac{1}{4}$	12	$1\frac{1}{16}$
$2\frac{1}{2}$	$\frac{5}{16}$	14	$\frac{3}{4}$
3	$\frac{3}{8}$	16	$1\frac{3}{16}$
4	$\frac{7}{16}$	18	$\frac{7}{8}$
6	$\frac{1}{2}$	20	$1\frac{5}{16}$
8	$\frac{9}{16}$	22	1
10	$\frac{5}{8}$	24	$1\frac{1}{8}$

Packed in half weight papers. One dozen papers in a package. Also packed in bulk—100, 50 and 25 pound Boxes.

CARPET TACKS

Blued or Tinned

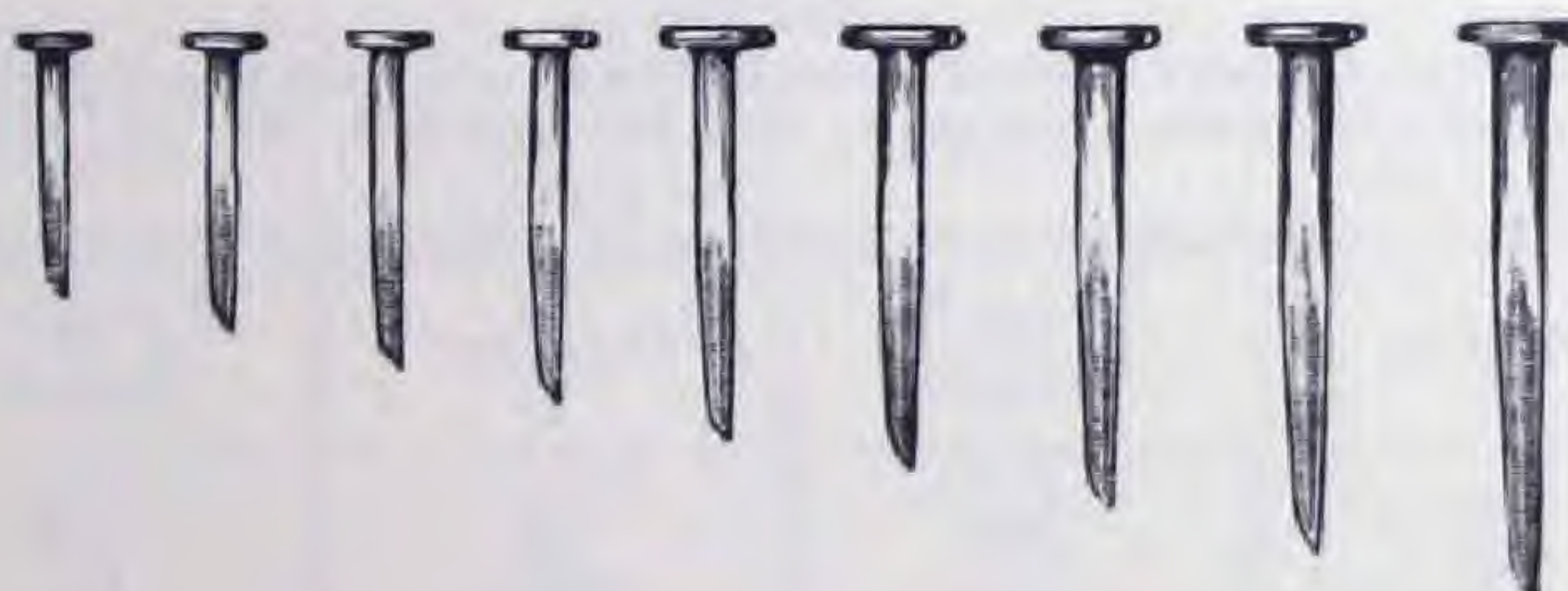


Ounces	Length Inches	Ounces	Length Inches
3	$\frac{3}{8}$	10	$\frac{5}{8}$
4	$\frac{7}{16}$	12	$1\frac{1}{16}$
6	$\frac{1}{2}$	14	$\frac{3}{4}$
8	$\frac{9}{16}$	16	$1\frac{3}{16}$

Packed in half weight papers. One dozen papers in a package. Also packed in bulk—100, 50 and 25 pound Boxes.

LACE TACKS

Blued or Tinned



Ounces	Length Inches	Ounces	Length Inches
$2\frac{1}{2}$	$\frac{3}{8}$	8	$\frac{5}{8}$
3	$\frac{7}{16}$	10	$1\frac{1}{16}$
4	$\frac{1}{2}$	12	$\frac{3}{4}$
6	$\frac{9}{16}$	14	$1\frac{3}{16}$

Packed in bulk—100, 50 and 25 pound Boxes.

GIMP TACKS

Blued or Tinned



Ounces	Length Inches	Ounces	Length Inches
2	$\frac{5}{16}$	8	$\frac{5}{8}$
$2\frac{1}{2}$	$\frac{3}{8}$	10	$1\frac{1}{16}$
3	$\frac{7}{16}$	12	$\frac{3}{4}$
4	$\frac{1}{2}$	14	$1\frac{3}{16}$
6	$\frac{9}{16}$		

Packed in half weight papers. One dozen papers in a package. Also packed in bulk—100, 50 and 25 pound Boxes.

SWEDES' CUT TACKS

Blued or Tinned



Ounces	Length Inches	Ounces	Length Inches
2	$\frac{1}{4}$	14	$\frac{3}{4}$
$2\frac{1}{2}$	$\frac{5}{16}$	16	$1\frac{3}{16}$
3	$\frac{3}{8}$	18	$\frac{7}{8}$
4	$\frac{7}{16}$	20	$1\frac{5}{16}$
6	$\frac{1}{2}$	22	1
8	$\frac{9}{16}$	24	$1\frac{1}{8}$
10	$\frac{5}{8}$		
12	$1\frac{1}{16}$		

Packed in bulk—100, 50 and 25 pound Boxes.

TRIMMERS' TACKS

Blued or Tinned



Ounces	Length Inches	Ounces	Length Inches
2	$\frac{1}{4}$	6	$\frac{1}{2}$
$2\frac{1}{2}$	$\frac{5}{16}$	8	$\frac{9}{16}$
3	$\frac{3}{8}$	10	$\frac{5}{8}$
4	$\frac{7}{16}$	12	$1\frac{1}{16}$

Packed in bulk—100, 50 and 25 pound Boxes.

For List Prices and Contents of Cases see first pages of this Section.

TACKS—Cont'd

UPHOLSTERERS' TACKS

Blued or Tinned



Ounces	Length Inches	Ounces	Length Inches
1	$\frac{3}{16}$	10	$\frac{5}{8}$
$1\frac{1}{2}$	$\frac{7}{32}$	12	$\frac{11}{16}$
2	$\frac{1}{4}$	14	$\frac{3}{4}$
$2\frac{1}{2}$	$\frac{5}{16}$	16	$\frac{13}{16}$
3	$\frac{3}{8}$	18	$\frac{7}{8}$
4	$\frac{7}{16}$	20	$\frac{15}{16}$
6	$\frac{1}{2}$	22	1
8	$\frac{9}{16}$	24	$1\frac{1}{8}$

Packed in bulk—100, 50 and 25 pound Boxes.

BASKET TACKS

Blued or Tinned



Ounces	Length Inches	Ounces	Length Inches
3	$\frac{3}{8}$	10	$\frac{5}{8}$
4	$\frac{7}{16}$	12	$\frac{11}{16}$
6	$\frac{1}{2}$	14	$\frac{3}{4}$
8	$\frac{9}{16}$		

Packed in bulk—100, 50 and 25 pound Boxes.

SOLID HEAD LINING TACKS

Japanned



Ounces	Length Inches	Ounces	Length Inches
4	$\frac{7}{16}$	10	$\frac{5}{8}$
6	$\frac{1}{2}$	12	$\frac{11}{16}$
8	$\frac{9}{16}$	14	$\frac{3}{4}$

Packed in bulk—100, 50 and 25 pound Boxes.

OVAL HEAD TRUNK TACKS

Blued, Tinned or Brass Plated



Regular

Regular Brass Plated Trunk Tacks are designated as No. 1 Trunk Tacks.



Special

Special Brass Plated Trunk Tacks are designated as No. 2 Trunk Tacks.



Heavy

Heavy Brass Plated Trunk Tacks are designated as No. 3 Trunk Tacks.

Ounces	Length Inches	Ounces	Length Inches
6	$\frac{1}{2}$	12	$\frac{11}{16}$
8	$\frac{9}{16}$	14	$\frac{3}{4}$
10	$\frac{5}{8}$		

Packed in bulk—100, 50 and 25 pound Boxes.

SHOT HEAD TRUNK TACKS

Blued, Tinned or Brass Plated



Regular

Shot Head Brass Plated Trunk Tacks are designated by the following numbers—Regular, No. 21; Special, No. 22; Heavy, No. 23.

Ounces	Length Inches	Ounces	Length Inches
6	$\frac{1}{2}$	12	$\frac{11}{16}$
8	$\frac{9}{16}$	14	$\frac{3}{4}$
10	$\frac{5}{8}$		

Packed in bulk—100, 50 and 25 pound Boxes.



For List Prices see beginning of Section.

TACKS—Cont'd

BILL POSTERS' OR RAILROAD TACKS

Blued or Tinned



Ounces	Length, Inches	Ounces	Length, Inches
2½	5/16	8	9/16
3	3/8	10	5/8
4	7/16	12	11/16
6	1/2	14	3/4

Packed in bulk—100, 50 and 25 pound Boxes.

CHEESE BOX TACKS

Blued

Flat or Oval Heads



Ounces	Length, Inches	Ounces	Length, Inches
6	1/2	12	11/16
8	9/16	14	3/4
10	5/8		

Take same List Prices as Upholsterers' Tacks.
Packed in bulk—100, 50 and 25 pound Boxes.

HIDE TACKS

Bright, Blued or Tinned



Ounces	Length, Inches	Ounces	Length, Inches
8	9/16	18	7/8
10	5/8	20	15/16
12	11/16	22	1
14	3/4	24	1 1/8
16	13/16		

Take same List Prices as Bill Posters' Tacks.
Packed in bulk—100, 50 and 25 pound Boxes.

PICTURE FRAME POINTS



Ounces	Length, Inches	Ounces	Length, Inches
4	1/2	12	3/4
8	5/8	16	7/8

Take same List Prices as Lace Tacks.
Packed in bulk—100, 50 and 25 pound Boxes.

BERRY BOX TACKS



Made in one size only—1½ oz.—1 inch long.
Take same List Prices as Basket Tacks.
Packed in bulk—100, 50 and 25 pound boxes.

BRUSH TACKS

Bright or Blued



Length in Inches...	4/8	5/8	6/8	7/8	8/8	9/8
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Made to order only. Prices on Application.
Packed in bulk—100, 50 and 25 pound Boxes.

STEEL CANOE TACKS

Blued or Tinned



Ounces	Length, Inches	Ounces	Length, Inches
6	1/2	14	3/4
8	9/16	16	13/16
10	5/8	18	7/8
12	11/16		

Prices on Application.
Packed in bulk—100, 50 and 25 pound Boxes.

WIRE TACKS

Wire Tacks can also be made up to order and follow the same List as corresponding kind of Tacks cut from plate.

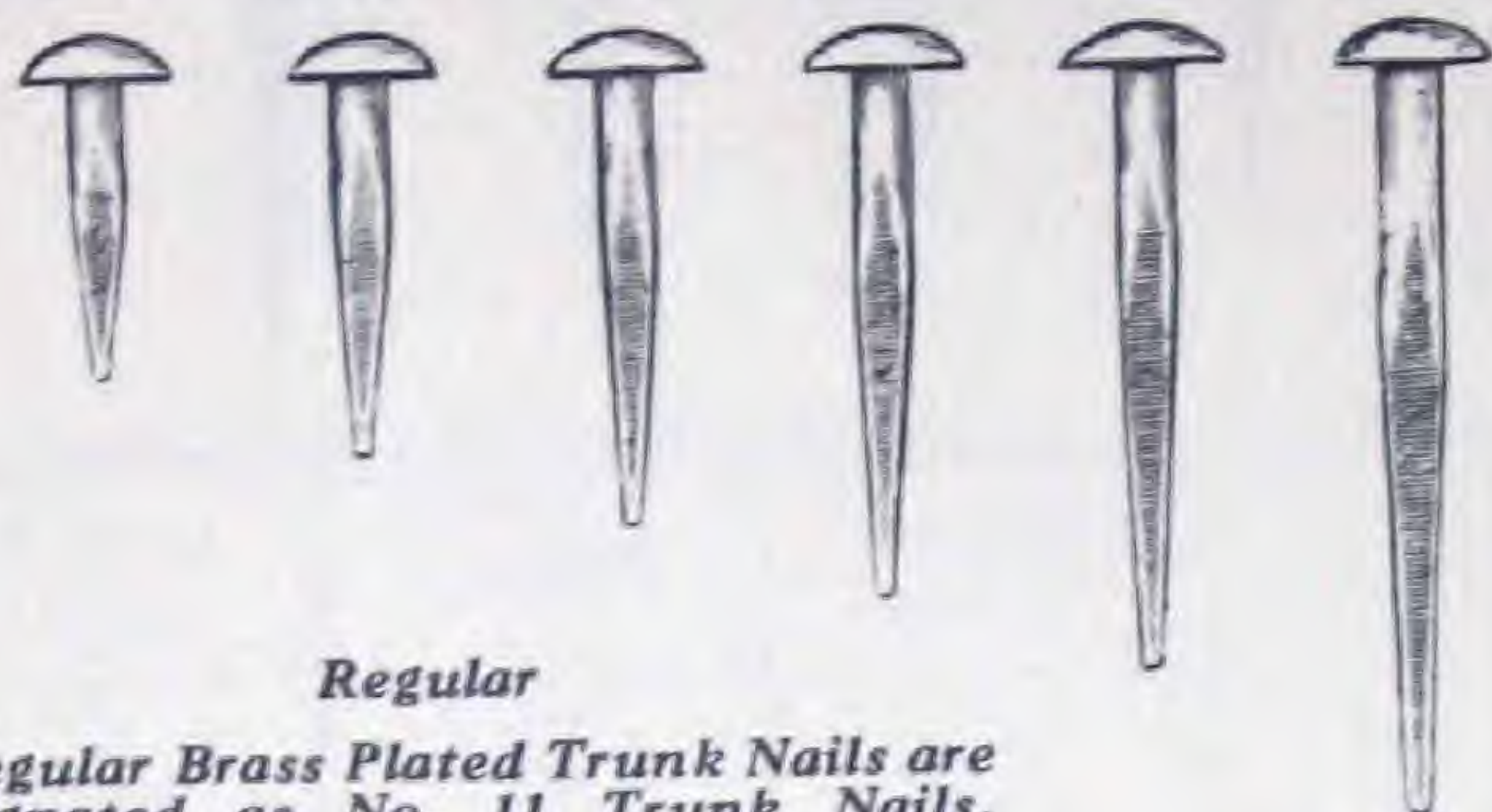


For List Prices see beginning of Section.

TACKS—Cont'd

TRUNK NAILS

Bright, Blued, Tinned, Coppered or Brass Plated

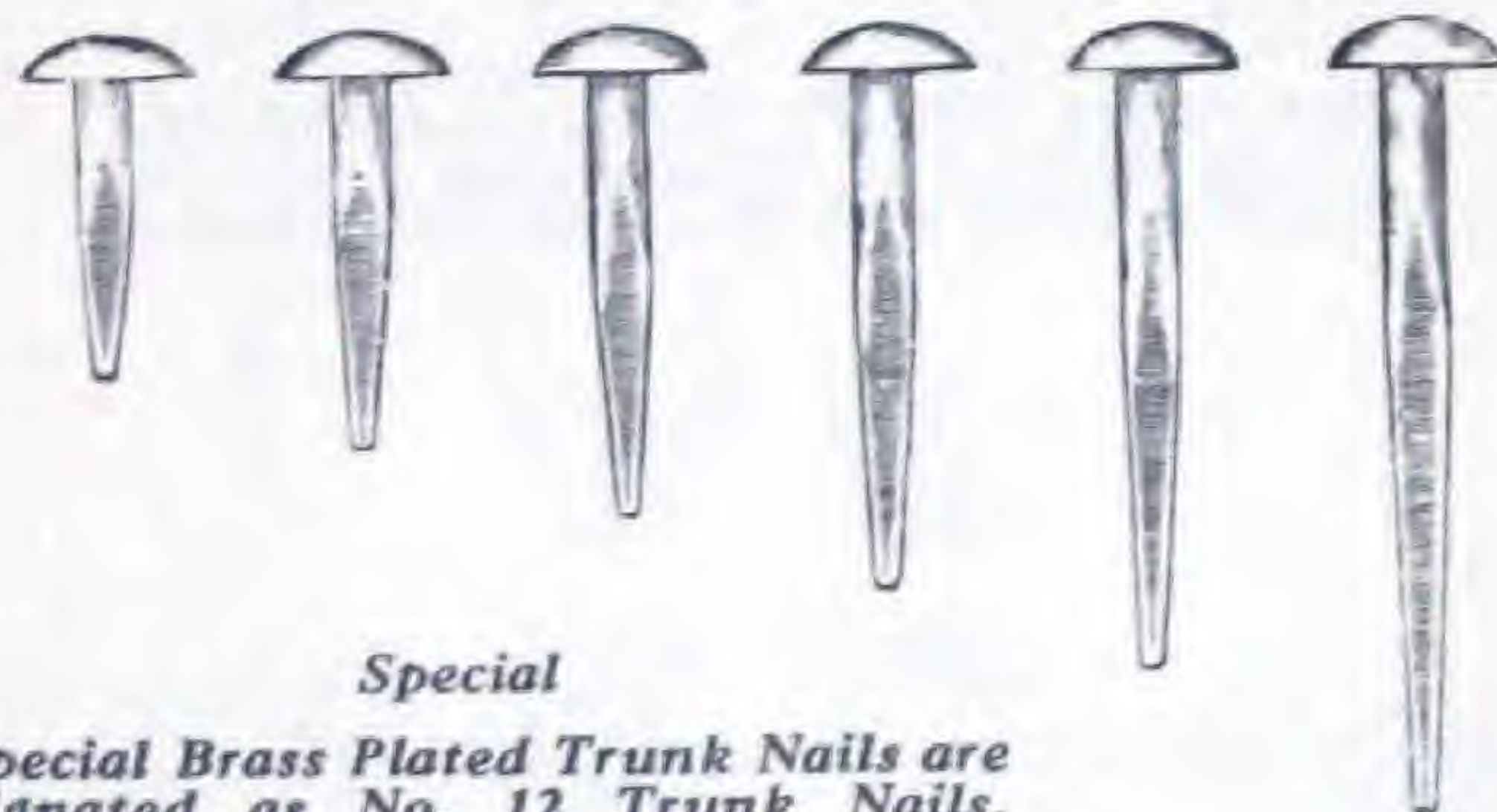


Regular

Regular Brass Plated Trunk Nails are designated as No. 11 Trunk Nails.

Length in Inches	$\frac{4}{8}$	$\frac{5}{8}$	$\frac{6}{8}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2
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Packed in bulk—100, 50 and 25 pound Boxes.



Special

Special Brass Plated Trunk Nails are designated as No. 12 Trunk Nails.

Length in Inches	$\frac{4}{8}$	$\frac{5}{8}$	$\frac{6}{8}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2
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Packed in bulk—100, 50 and 25 pound Boxes.



Heavy

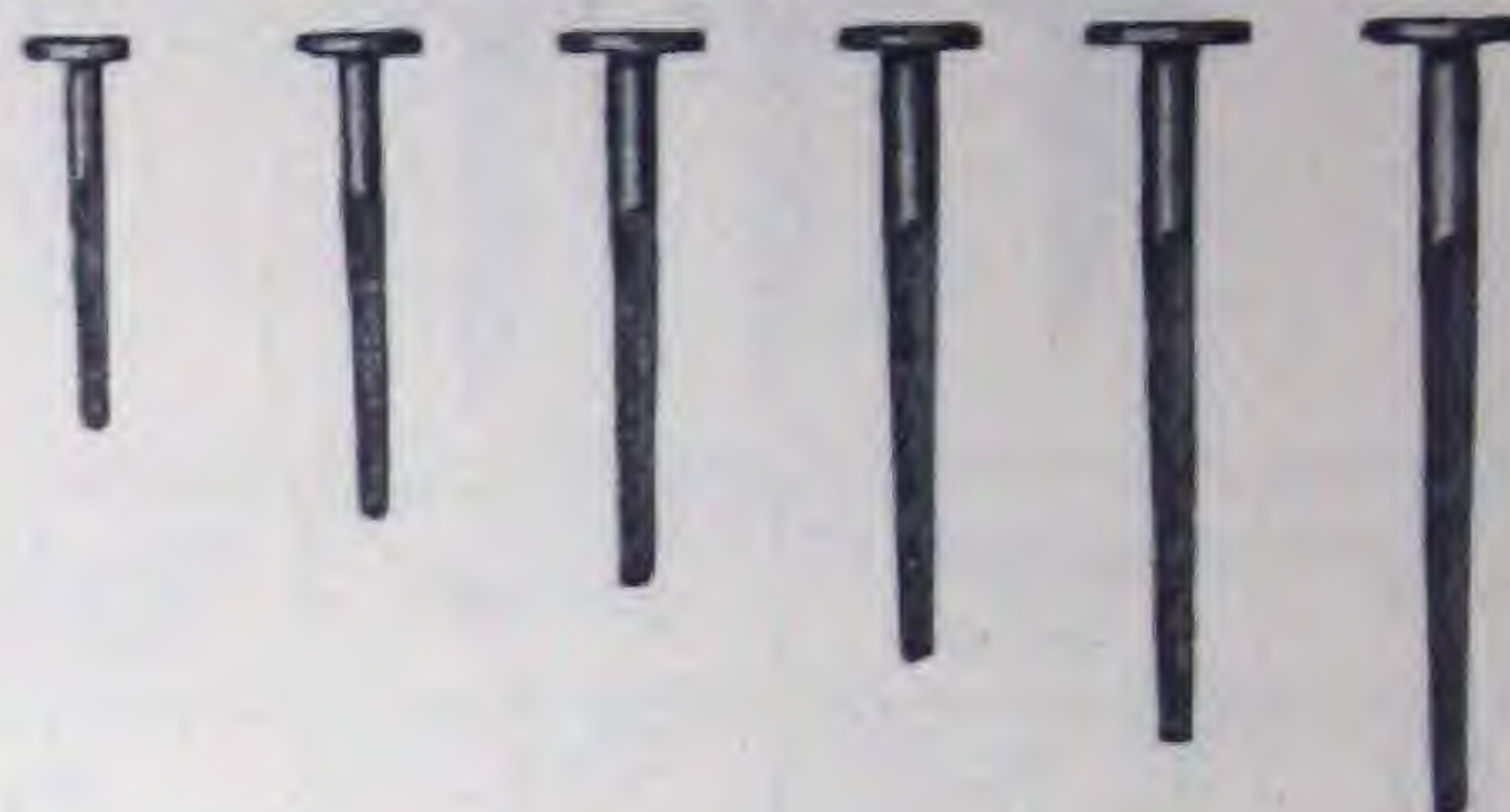
Heavy Brass Plated Trunk Nails are designated as No. 13 Trunk Nails.

Length in Inches	$\frac{4}{8}$	$\frac{5}{8}$	$\frac{6}{8}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2
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Packed in bulk—100, 50 and 25 pound Boxes.

CLOUT NAILS

Bright, Blued, Tinned, Coppered, Galvanized or Copper



Length in Inches	$\frac{4}{8}$	$\frac{5}{8}$	$\frac{6}{8}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2
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Packed in bulk—100, 50 and 25 pound Boxes.

CUT BASKET NAILS

Bright, Blued or Tinned

Length in Inches	$\frac{5}{8}$	$\frac{6}{8}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2
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Made to order only.

Packed in bulk—100, 50 and 25 pound Boxes.

CUT CHAIR NAILS

Bright, Blued or Tinned



Length in Inches	$\frac{5}{8}$	$\frac{6}{8}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2
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Packed in bulk—100, 50 and 25 pound Boxes.

CUT CIGAR BOX NAILS

Bright, Blued or Tinned

Length in Inches	$\frac{5}{8}$	$\frac{6}{8}$	$\frac{7}{8}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2
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Packed in bulk—100, 50 and 25 pound Boxes.

COPPER NAILS

All Sizes

Price quoted on Application.



For List Prices see beginning of Section.

TACKS—Cont'd

OVAL HEAD CAPPED SADDLE NAILS

Silvered or Japanned. Enamelled in Colours to Order.



List Prices

No. 4—All lengths, 100 to paper, per paper...	\$0.90
No. 4—All lengths, in bulk, per pound.....	2.00

*In Papers of 100, 10 papers in a package.
In Boxes of 50 or 100 pounds, to order.*

FLAT HEAD CAPPED SADDLE NAILS

Made to order only. Take same list as Oval Head Saddle Nails.

OVAL HEAD CAPPED LINING TACKS No. 33.

Silvered or Japanned



In Papers

2½ to 12 ozs. (75 in a paper), per paper.....	\$0.23
14 to 16 ozs. (75 in a paper), per paper.....	0.31

Packed in Papers of 75, 20 papers in a package.

In Bulk

Ounces	Per Pound	Ounces	Per Pound
2½	\$2.60	10	\$1.95
3	2.30	12	1.90
4	2.15	14	1.85
6	2.10	16	1.80
8	2.00	..	....

Packed in Boxes of 25, 50 or 100 pounds, to order.

TIN CAPPED TRUNK TACKS No. 31

Same price as Lining Tacks.

TUFTING BUTTONS

Silvered, Japanned or Green. Enamelled in Colours to Order.



22 Line or ½ inch Diameter.

List Prices

Silvered or Japanned (100 count in doz.) per doz..	\$ 7.50
Colours (100 count in doz.) per doz.....	10.25

*Packed in Papers of 100, 1 dozen papers per package.
Also in Packages. 12 papers of 1 gross = 1 great gross (1,728 buttons) or in bulk by great gross.*

GALVANIZED TACKS

All tacks, other than copper or brass, can be galvanized.

TIN CAPPED TRUNK NAILS No. 32



List Price in one pound papers.

Inches	Per Lb.	Inches	Per Lb.
1½	\$1.80	1½	\$1.35
¾	1.55	1¼	1.25
7/8	1.45	1½	1.10
1	1.35	1¾	1.10

Packed in One Pound Papers, 25, 50 and 100 Pound Boxes.

ZINC COATED GLAZIERS' POINTS

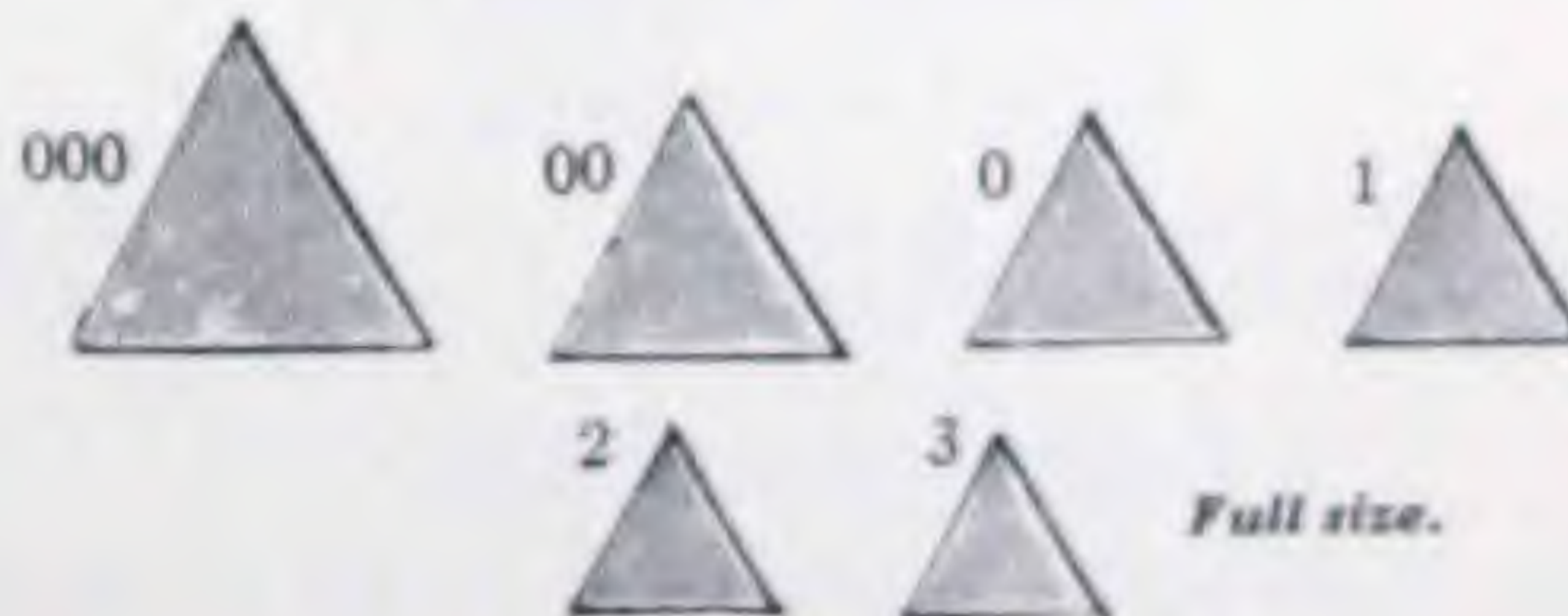
for Counter Display



*To retail at 5 cents
a package of 2 ozs.
Packed 12 papers
in a display car-
ton, printed in
colour, 50 cartons
to a case.*

*Price on
Application.*

Also packed in Half Pound Papers.



Prices on Application.

*The above List Prices were adopted May 1st, 1929.
Brass or Copper Plating—Prices quoted on application.*

22
23
24
25



SHOE FINDINGS

List Prices adopted January 2nd, 1931.

STEEL WIRE SHOE RIVETS

List price per 100 Lbs. packed in one pound papers. For bulk shipments deduct 25 cents nett for quantities of 100 lbs. of a size.

Size	16 Gauge and Heavier	
	Common	Clinch Point
$\frac{3}{8}$ to $4\frac{1}{2}/8$	\$14.50	\$15.00
$\frac{5}{8}$ to $6\frac{1}{2}/8$	14.25	14.75
$\frac{7}{8}$ to $8\frac{1}{2}/8$	13.00	13.50
$\frac{9}{8}$ to $17/8$	11.25	11.75

Extras per 100 lbs. for Gauges:—

17 Ge. add \$1.00; 18 Ge. add \$2.00; 19 Ge. add \$3.00.

Also made of Brass. Prices on application.

STEEL COBBLERS' RIVETS

List price per 100 lbs. packed in one pound papers. For bulk shipments deduct 25 cents nett for quantities of 100 Lbs. of a size.

Size		Size	
$\frac{3}{8}$ to $4\frac{1}{2}/8$	\$19.25	$\frac{7}{8}$ to $8\frac{1}{2}/8$	\$16.00
$\frac{5}{8}$ to $6\frac{1}{2}/8$	17.50	$\frac{9}{8}$ to $17/8$	14.50

Also made in Brass. Prices on application.

HOB AND HUNGARIAN NAILS

11-12-13 Gauge & Heavier.	$\frac{3}{8}$ and shorter	\$17.30 per 100 lbs
	$3\frac{1}{2}/8$ and longer	16.80 " " "

14 Gauge Shot Head Hungarian, add \$4.00 per 100 lbs.
Standard packing—Hob Nails $\frac{1}{2}$ lb. papers; Hungarian Nails $\frac{1}{2}$ lb. and 1 lb. papers.
If in Bulk, deduct 80 cents per 100 lbs. from list.

CHANNEL NAILS

In 1 lb. Papers

$\frac{3}{8}$	\$18.75 per 100 lbs.	$\frac{3}{8}$ and longer	\$17.25 per 100 lbs.
$3\frac{1}{2}/8$	18.25 " " "		

PACKING EXTRAS

Add to List per 100 lbs.

All goods packed in $\frac{1}{2}$ lb. papers.....	\$2.00
All goods packed in $\frac{1}{4}$ lb. papers.....	4.00

CONTENTS OF CASES

Shoe Tacks from 1 oz. to 4 oz. are packed 48 doz. in a case; 5 oz. and 6 oz., 30 doz. in a case.

Hungarian Nails in half and one pound papers, in 100 pound cases.

All others in one pound papers, in 100 pound cases.
Goods in bulk in 100 pound packages.

HEEL OR SHOE NAILS

Soft Steel

14 ge. and heavier.	$\frac{4}{8}$ to $16\frac{1}{2}/8$	In bulk.	\$12.30 per 100 lbs.
		In 1 lb. papers	13.10 " " "
	$17/8$ & longer	In 100 lb. lots	Add 65c to above

Hard Steel

14 ge. and heavier	$\frac{4}{8}$ to $16\frac{1}{2}/8$	In bulk	\$22.00 per 100 lbs.
		In 1 lb. papers	22.80 " " "
	$17/8$ & longer		Add 65c per 100 lbs.

Sliver Point

14 ge. and heavier	$\frac{4}{8}$ to $16\frac{1}{2}/8$	In bulk	\$13.30 per 100 lbs.
		In 1 lb. papers	14.10 " " "
	$17/8$ & longer	In 100 lb. lots	Add 65c to above

Heel Plate Nails in 1 lb. papers \$14.75 per 100 lbs.

Wood Heel Nails in 1 lb. papers $\frac{5}{8}$ and longer 16 ge. \$19.25; 17 ge. \$20.25 per 100 lbs.

SHOE TACKS

List Price per 100 Lbs. packed in 1 Lb. Papers.

Size	Shoe or Hand	Replac- ing	Machine Welt	Machine McKay
$\frac{1}{2}$ oz.	\$33.50			\$36.25
$\frac{3}{4}$ " "	30.25			32.50
1 " "	27.25			29.25
$1\frac{1}{4}$ " "	26.00			28.00
$1\frac{1}{2}$ " "	24.25		\$23.50	26.50
2 " "	21.75	\$22.25	22.25	25.25
$2\frac{1}{2}$ " "	19.25	21.25	20.75	24.75
3 " "	16.75	20.00	19.50	24.75
4 and longer	15.50	19.25	18.75	.....

McKay Machine Tacks, Blunt Point, charge same as McKay Machine Tacks.

Insole Machine Tacks, charge same as Machine Welt.

Machine Loose Tackers' Tacks, charge same as McKay Machine Tacks.

Insole Hand Tacks, charge same as Hand Shoe Tacks.

Pullers' Tacks, charge same as Hand Shoe Tacks.

Allowance for 100 lbs. or over of a size in bulk 25c per 100 lbs. nett.

SHOE TACKS

List Price per 100 dozen papers packed in cartons each containing one dozen papers. The size of tack in ounces also indicates the weight of each paper.

$1\frac{1}{2}$ and smaller	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4
\$36.00	43.00	49.00	54.00	59.00	64.00
5	6	8	10	12	14
79.00	93.00	118.00	146.00	165.00	185.00

SHOE FINDINGS—Cont'd

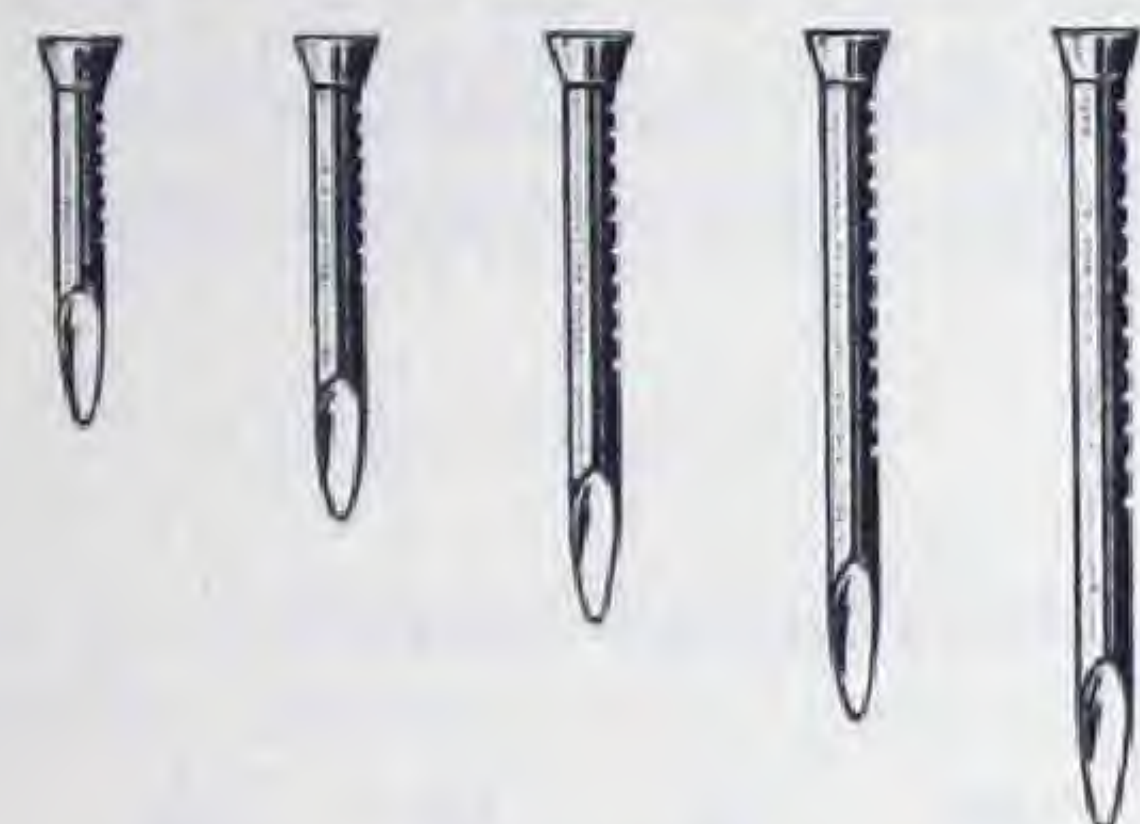
SHOE RIVETS Steel or Brass Wire



Gauges	Lengths in Inches				
16, 17, or 18	3/8	6/8	9/8	12/8	15/8
	3 1/2/8	6 1/2/8	9 1/2/8	12 1/2/8	15 1/2/8
	4/8	7/8	10/8	13/8	16/8
	4 1/2/8	7 1/2/8	10 1/2/8	13 1/2/8	16 1/2/8
	5/8	8/8	11/8	14/8	17/8
	5 1/2/8	8 1/2/8	11 1/2/8	14 1/2/8	

Packed in one pound papers. Bright Rivets always shipped unless otherwise specified.

CLINCH POINT SHOE RIVETS Steel or Brass Wire



Gauges	Lengths in Inches				
16, 17, or 18	3/8	6/8	9/8	12/8	15/8
	3 1/2/8	6 1/2/8	9 1/2/8	12 1/2/8	15 1/2/8
	4/8	7/8	10/8	13/8	16/8
	4 1/2/8	7 1/2/8	10 1/2/8	13 1/2/8	16 1/2/8
	5/8	8/8	11/8	14/8	17/8
	4 1/2/8	8 1/2/8	11 1/2/8	14 1/2/8	

Packed in one pound papers. Bright Rivets always shipped unless otherwise specified.

COBBLERS' RIVETS Steel or Brass



Gauges	Lengths in Inches				
16, 17, or 18	3/8	6/8	9/8	12/8	15/8
	3 1/2/8	6 1/2/8	9 1/2/8	12 1/2/8	15 1/2/8
	4/8	7/8	10/8	13/8	16/8
	4 1/2/8	7 1/2/8	10 1/2/8	13 1/2/8	16 1/2/8
	5/8	8/8	11/8	14/8	17/8
	5 1/2/8	8 1/2/8	11 1/2/8	14 1/2/8	

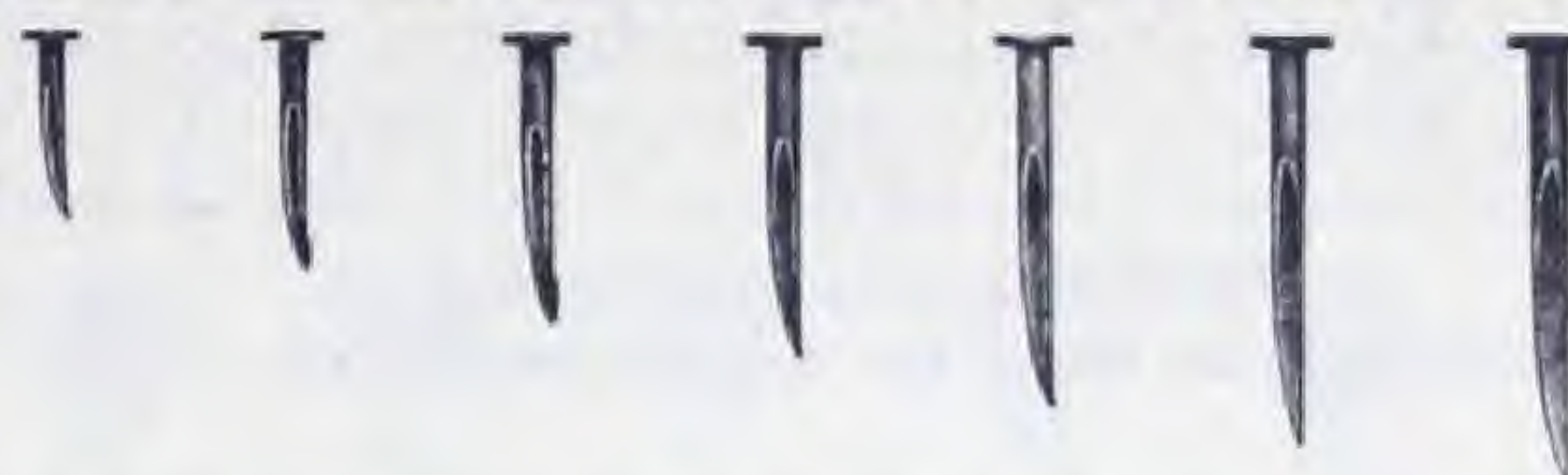
Packed in one pound papers. Bright Rivets always shipped unless otherwise specified.

CHANNEL NAILS



Length in Inches...	3/8	3 1/2/8	4/8	4 1/2/8	5/8
Packed in one pound papers.					

SHOE OR HAND LASTING TACKS



Ounces	Length in Inches	Ounces	Length in Inches	Ounces	Length in Inches
1/2	7/32	2 1/2	1/2	8	7/8
3/4	9/32	3	9/16	9	1 5/16
1	5/16	3 1/2	1 9/32	10	1
1 1/4	1 1/32	4	5/8	12	1 1/8
1 1/2	3/8	5	1 1/16	14	1 1/4
2	7/16	6	3/4	16	1 3/8
		7	1 3/16	18	1 1/2

Packed in one pound papers or in bulk.

PULLERS TACKS



Ounces.....	2	2 1/2	3	4	6
Length in Inches...	7/16	1/2	9/16	5/8	1 1/16

Packed in one pound papers or in bulk.

REPLACING TACKS



Ounces.....	2	2 1/2	3	4
Length in Inches...	7/16	1/2	9/16	5/8

Packed in one pound papers or in bulk.

MACHINE WELT TACKS



Ounces.....	1 1/2	2	2 1/2	3	4
Length in Inches...	3/8	7/16	1/2	9/16	5/8

Packed in one pound papers or in bulk.

MACHINE MCKAY TACKS



Blunt Point Sharp Point

Ounces	Length in Inches	Ounces	Length in Inches	Ounces	Length in Inches
1/2	3/16	1 1/4	1 1/32	2 1/2	1/2
3/4	1/4	1 1/2	3/8	3	9/16
1	5/16	2	7/16		

Packed in one pound papers or in bulk.

For List Prices see Page 190

SHOE FINDINGS—Cont'd

INSOLE HAND AND MACHINE TACKS



Hand



Machine

Ounces.....	2½	3	4
Length in Inches....	½	9/16	5/8

*Packed in one pound papers.
Sold on the same list as Machine Welt Tacks.*

STEEL LOOSE NAILS

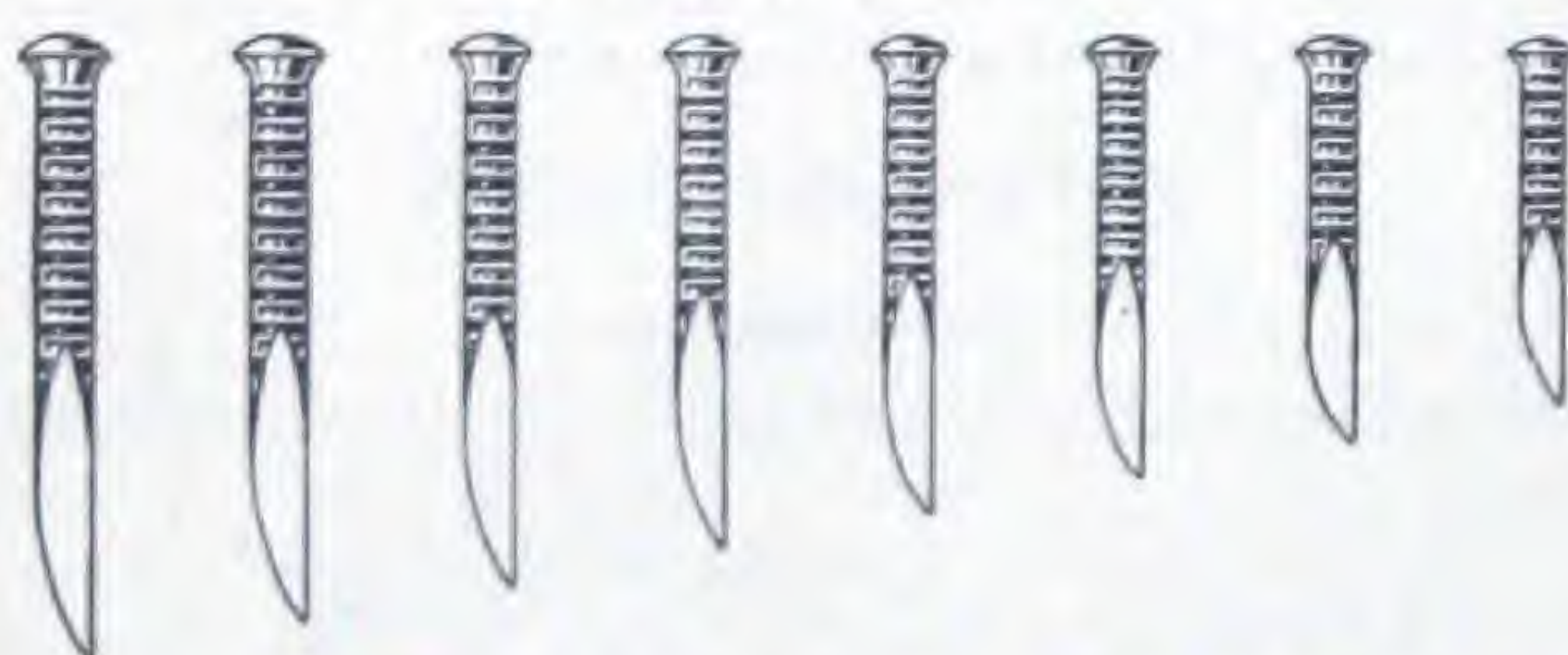
For Machine Driving



Supplied in No. 10, 12, 19 and 39 head in lengths 3/8, 3½/8, 4/8, 4½/8, 5/8, 6/8, 8/8 and longer.

*Packed in 5 pound papers.
Prices quoted on application.*

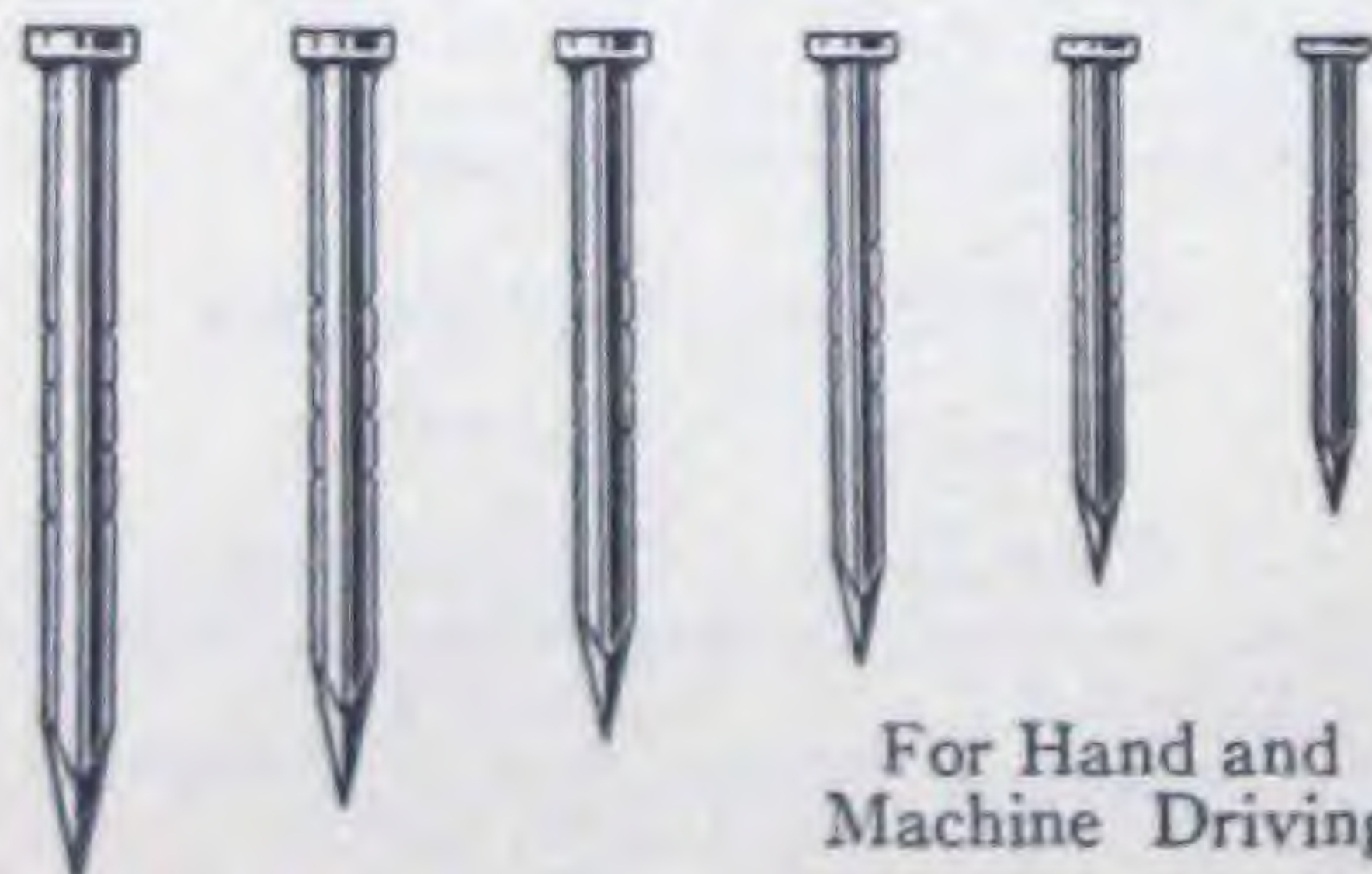
SOLING NAILS



Made in lengths 3/8, 3½/8, 4/8, 4½/8, 5/8, 5½/8, 6/8, 6½/8, 7/8, 7½/8, 8/8 and longer.

*Packed in one pound papers.
Prices quoted on application.*

WIRE RUBBER HEEL NAILS



For Hand and
Machine Driving

Made in lengths 5/8, 6/8, 7/8, 8/8, 9/8, 10/8, 11/8, and longer.

*Packed in bulk, one pound papers or in envelopes containing
sufficient for a pair of shoes.
Prices quoted on application.*

MACHINE LOOSE TACKERS TACKS

Plumbago Coated



Ounces.....	1½	2
Length in Inches.....	3/8	7/16

*Packed in one pound papers.
Sold on the same list as McKay Machine Tacks.*

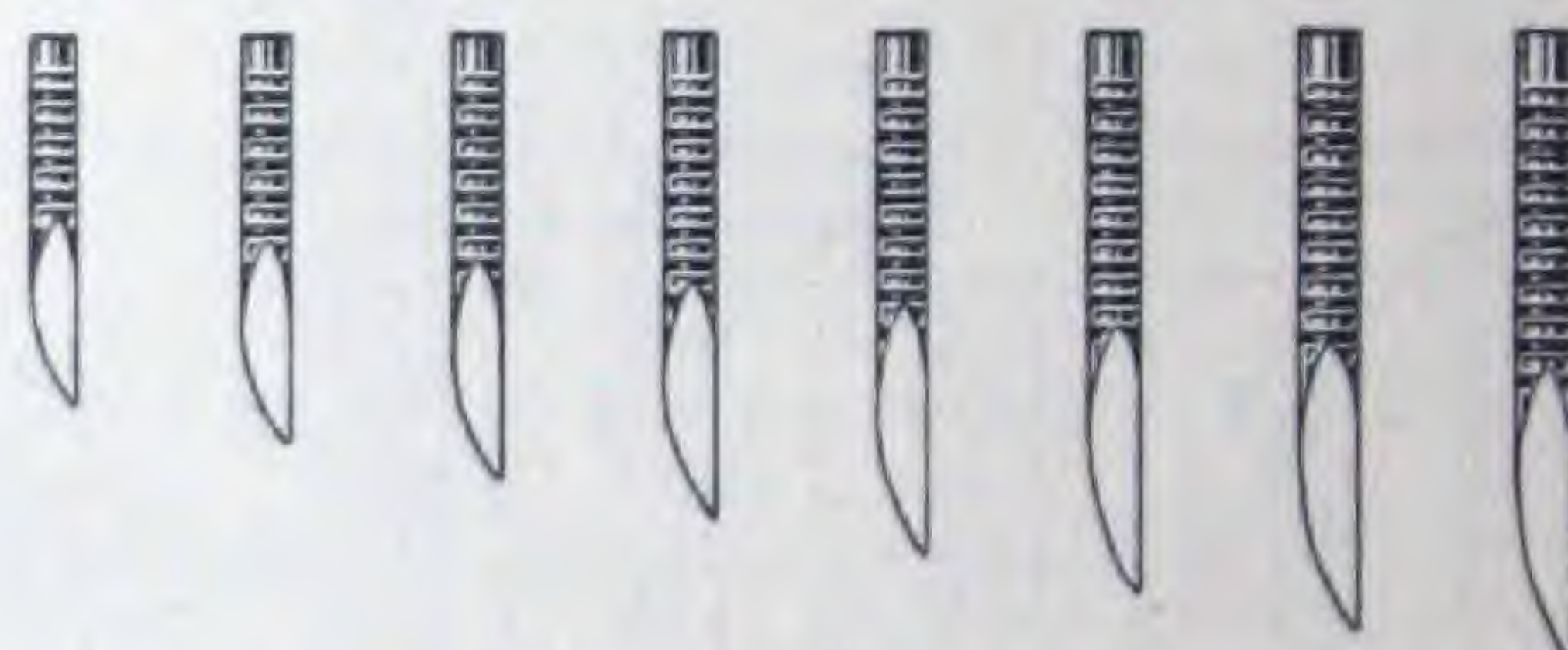
TINNED BACK SEAM NAILS



Gauge 18	Length in Inches 5/8
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*Packed in one pound papers.
Prices quoted on application.*

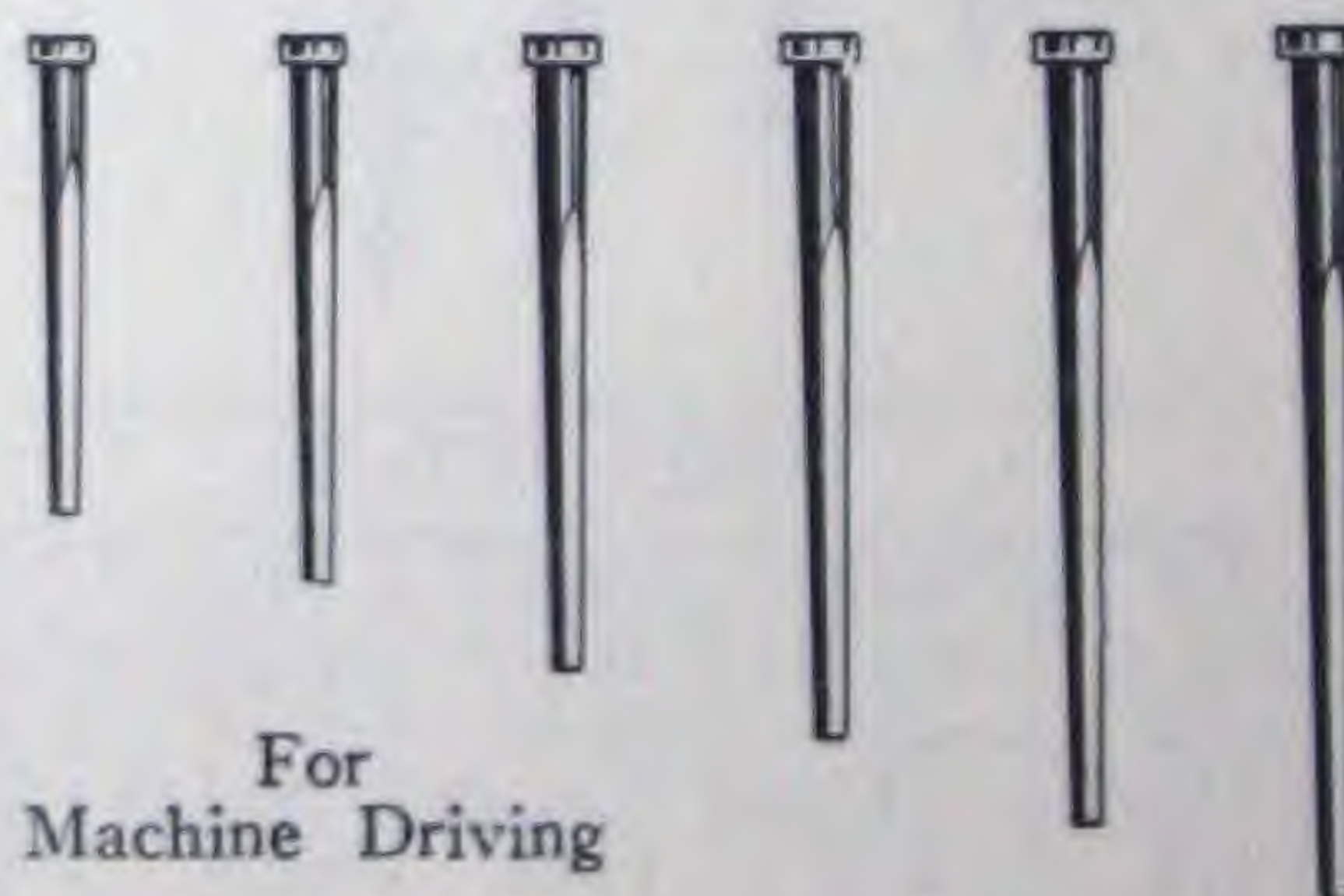
PEGGING NAILS



Made in lengths 3/8, 3½/8, 4/8, 4½/8, 5/8, 5½/8, 6/8, 6½/8, 7/8, 7½/8, 8/8 and longer.

*Packed in one pound papers.
Prices quoted on application.*

CUT RUBBER HEEL NAILS



For
Machine Driving

Made in lengths 5/8, 6/8, 7/8, 8/8, 9/8, 10/8, 11/8 and longer.

*Packed in bulk only.
Prices quoted on application.*

SHOE FINDINGS—Cont'd

HEEL OR SHOE NAILS



Gauges	Lengths in Inches				
17, 16		6/8	9/8	12/8	15/8
15, 14,		6 1/2/8	9 1/2/8	12 1/2/8	15 1/2/8
and	4/8	7/8	10/8	13/8	16/8
heavier	4 1/2/8	7 1/2/8	10 1/2/8	13 1/2/8	16 1/2/8
	5/8	8/8	11/8	14/8	
	5 1/2/8	8 1/2/8	11 1/2/8	14 1/2/8	

Packed in one pound papers and in bulk.

WOOD HEEL NAILS

Bright or Cement Coated



Made in 16 Gauge or 17 Gauge—3/8 and 5/8 inches long, with pencil points. Packed in one pound papers.

ARMY HEEL PLATE NAILS



The standard mostly used is 11 gauge, 7/8 inches long. Clinch point and deep countersunk head. Also made to order to fit any style of plate.

Packed in one pound papers or in bulk.

HOB NAILS



Made in 11-12-13 Gauges and Heavier.

Length in Inches	3/8	3 1/2/8	4/8	4 1/2/8	5/8	5 1/2/8	6/8
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Packed in one pound papers or in bulk

HUNGARIAN NAILS



Round Head



Cone Head



Pyramid Head

Made in 11-12-13 Gauges and heavier. Shot Head style also made 14 Gauge.

Length in Inches	3/8	3 1/2/8	4/8	4 1/2/8	5/8
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Packed in one pound papers and in bulk.

WINGED SCREW BOOT CALKS



No. "L"—Specially for Ladies' Golf Shoes. Gives a positive grip on the fairway.

No. "G"—Slightly larger in size for Men's Golf Shoes. The style of stud that is in vogue.

No. 00—For Heavy Sporting Shoes, Miners, Prospectors, Hunters, Quarry Men, Mill Work, etc. Wear well on Rocks.

No. 4—Civil and Mining Engineers, Cruisers, Hunters, Roofers, Teamsters, Ice Creepers, etc. A very popular size.

No. 5—The Lumberman's Favorite. An excellent calk for river driving. Will hold on hard timber, and not work loose in a soft wet sole.

No. 7—Loggers, Ice Cutters, Harvesters, Mountain Climbers, Laborers on embankments, and Light Shoe Heels.

No. 8—Has a long screw for Heels or Heavy Soles. Used for any purpose requiring a deep penetration.

Tool for inserting with every package. Supplied bright or nickel plated finish. Packed 50 calks of a size in a box and also in bulk.

Prices on application.

For List Prices see Page 190.

SCREWS



Section of the Wood Screw Manufacturing Department at Canada Works

In the following pages you will find important data concerning Standard Wood Screws and Machine Screws. In addition to these Standards, we make a wide variety of Specials.

It is interesting to note the changes in screw requirements during the past ten or fifteen years. Prior to 1915 the standard sizes and styles, comparatively speaking, were sufficient to meet the needs of those firms using Screws in the manufacture of their products. Since then the popularizing of the motor car, the wonderful advance in the use of electrical appliances of all kinds, the advent of the radio, and other developments, have all tended to create a demand for many special Screw products.

Our Company has sixty-four years of experience behind it, and has kept abreast of the times by installing new equipment whenever the need has arisen. We are making more types of Screws and giving better quality and service than at any other time in our history.

Our experts will gladly give you the benefit of their experience in the designing of special screws to meet specific needs.

Factories are located at Hamilton and Lachine, and stocks are carried at these points and at Montreal.

TO DETERMINE THE LENGTHS OF SCREWS

Wood Screws

SLOT HEADS—Flat countersunk head, round head and bung head screws are measured overall.
Drive screws are measured overall.
Fillister head screws are measured from under the head.
Oval countersunk head screws are measured from the top of the countersink.

SOCKET HEADS—Flat countersunk head and round head screws are measured overall.
Oval countersunk head screws are measured from the top of the countersink.

Felloe and Dowel Screws are measured overall.

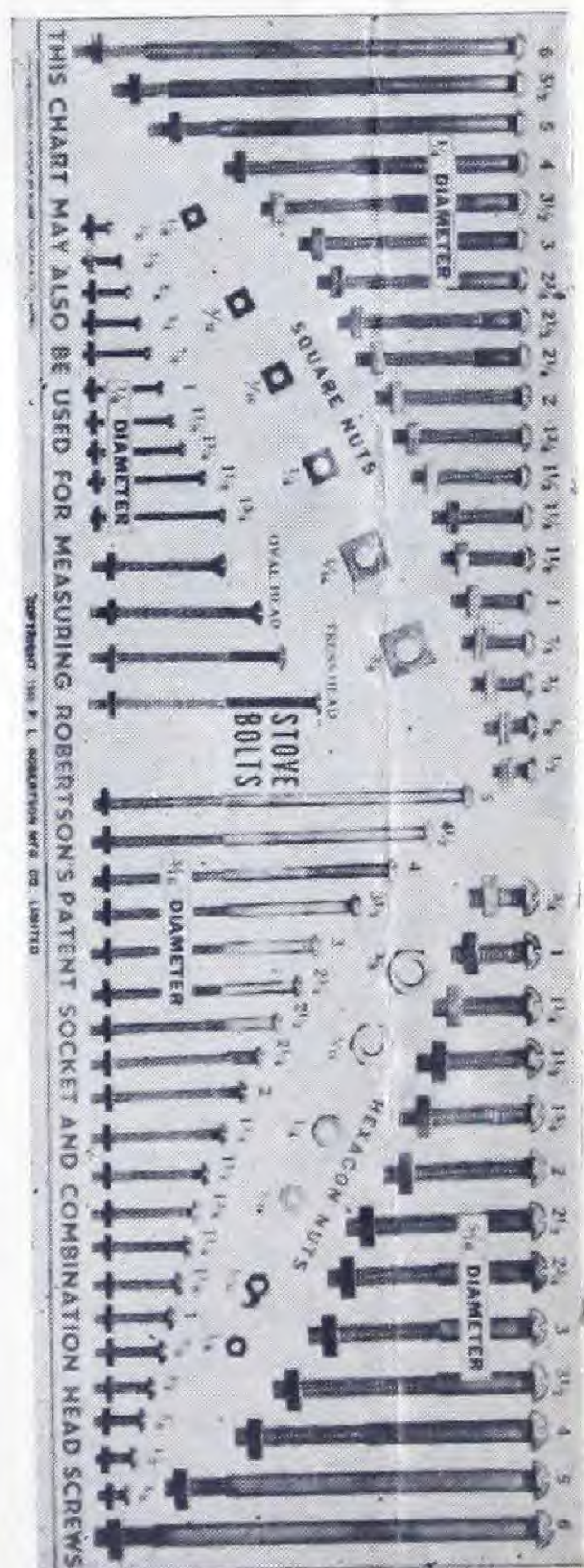
Machine Screws

Flat countersunk head screws are measured overall.

Round head, washer head, fillister head, binding head and Cock screw head screws are measured from under the head.

Oval countersunk head screws are measured from the top of the countersink.

Mail the enclosed return postcard or write immediately for your free copy while the supply lasts—you incur no obligation.



Size of Chart, 32" x 22"

P. L. ROBERTSON MFG. CO. LTD. - Milton, Ont.

(Incorporated 1908)

Manufacturers of high quality Slot Head Wood Screws, Stove Bolts, Machine Screws and Sheet Metal Screws.

Originators and manufacturers of Robertson Patent Socket Head and Combination Head Wood Screws, Stove Bolts, Machine Screws, etc.

STEEL CO



gross in a package is indicated by the small figures inserted in the price list above. The division is made by a line.

lents will be found under Explanation of Gauges number 7 on gauge list.

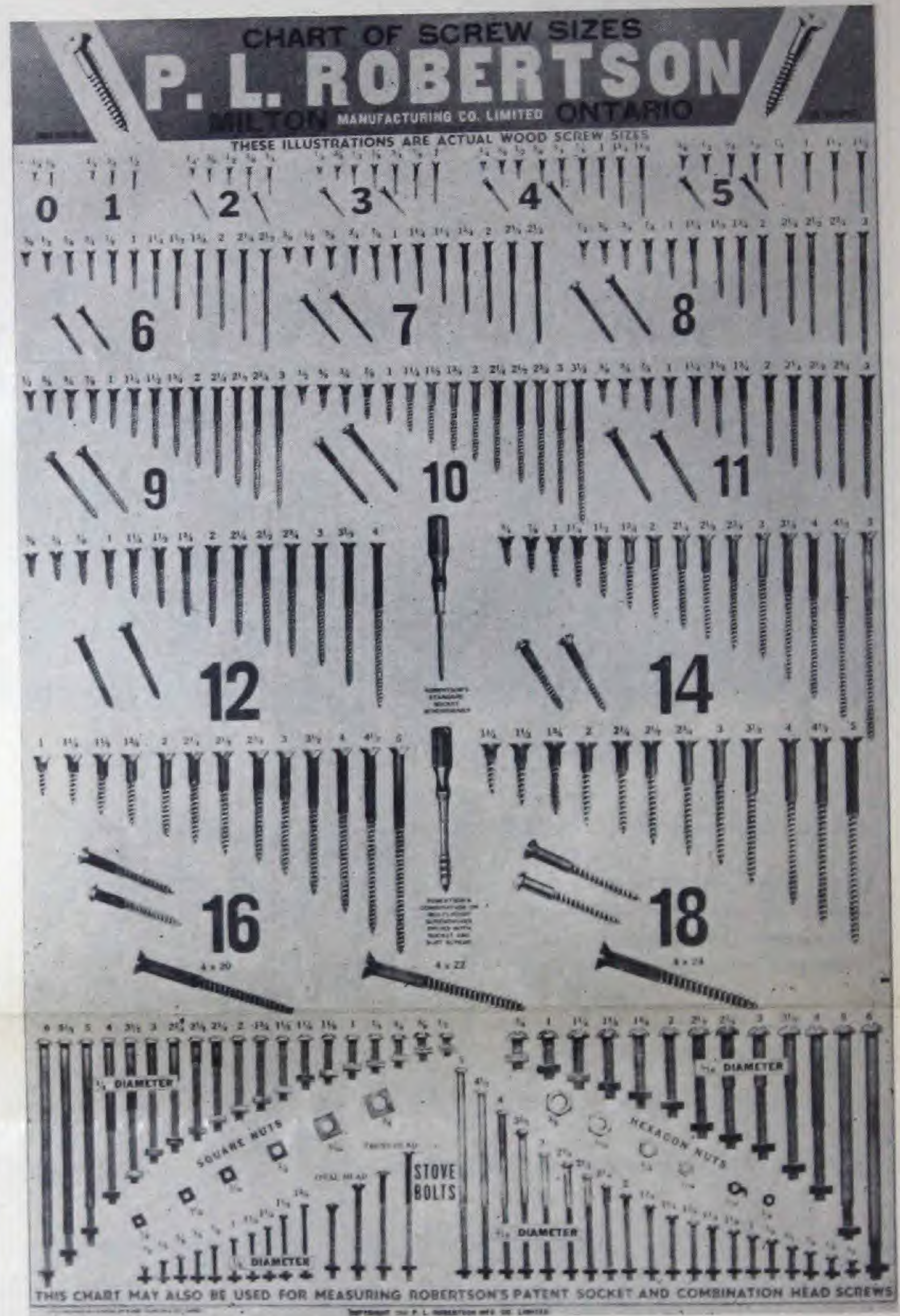
First Aid for the Handlers of Wood Screws

Robertson's Free Chart of Screw Sizes

NO MORE guessing what size of Wood Screw or Stove Bolt is wanted. Use the new Chart of Screw Sizes which has been originated by P. L. Robertson Manufacturing Co. Limited and which is now offered FREE to every dealer in Canada who handles Wood Screws and Stove Bolts.

It illustrates IN ACTUAL SIZE, every gauge and length of Wood Screw from No. 0 to No. 18 gauges, as well as every length of Stove Bolt in $\frac{1}{8}$ " to $\frac{5}{16}$ " diameters. The chart is in two colors and is a very attractive and useful wall hanger.

Mail the enclosed return postcard or write immediately for your free copy while the supply lasts—you incur no obligation.



Size of Chart, 32" x 22"

P. L. ROBERTSON MFG. CO. LTD. - Milton, Ont.
(Incorporated 1908)

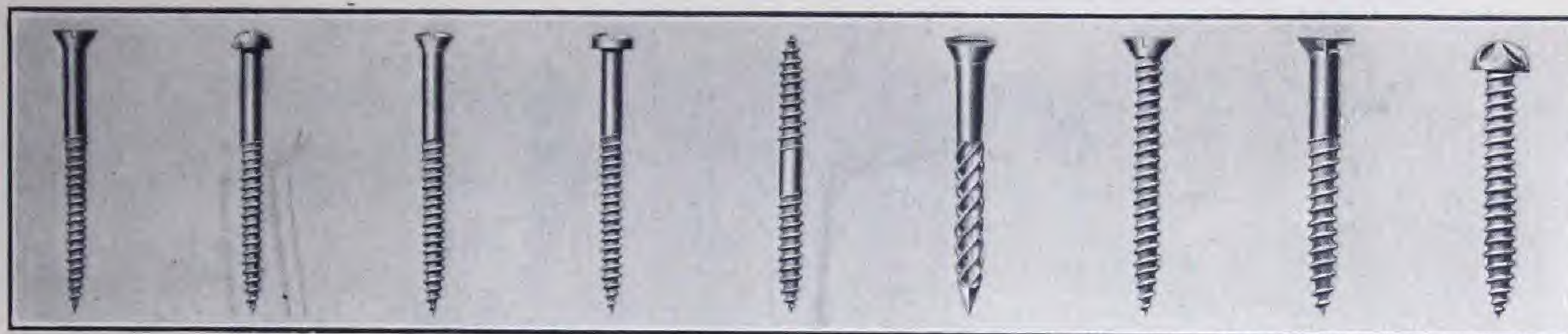
Manufacturers of high quality Slot Head Wood Screws, Stove Bolts, Machine Screws and Sheet Metal Screws.

Originators and manufacturers of Robertson Patent Socket Head and Combination Head Wood Screws, Stove Bolts, Machine Screws, etc.



STEEL WOOD SCREWS

The following styles of Steel Wood Screws are invoiced from this list at varying discounts.



Flat
Head

Round
Head

Oval
Head

Fillister
Head

Dowel
Screw

Drive
Screw

Felloe
Screw

Bung
Head

Clove
Head

CAN BE FURNISHED IN THE FOLLOWING PLATED FINISHES

Antique Brass
Antique Bronze
Antique Copper
Blued

Brass Plated
Bronze Plated
Cadmium Plated
Chromium Plated

Copper Plated
Dull Brass Plated
Dull Nickel Plated
Electro Galvanized

Gun Metal
Hot Galvanized
Japanned
Nickel Plated

Oxidized
Silver Plated
Tinned
White Nickerled

Variations in the above finishes will also be considered.

PRICE PER GROSS

Adopted February 13th, 1928.

$\frac{1}{4}$ Inch	$\frac{3}{8}$ Inch	$\frac{1}{2}$ Inch	$\frac{5}{8}$ Inch	$\frac{3}{4}$ Inch	$\frac{7}{8}$ Inch	1 Inch	$1\frac{1}{4}$ Inch	$1\frac{1}{2}$ Inch	$1\frac{3}{4}$ Inch
No. \$	No. \$	No. \$	No. \$	No. \$	No. \$	No. \$	No. \$	No. \$	No. \$
1 .24	1 .26	1 .28	2 .30	2 .32	3 .34	3 .36	4 .38	4 .40	6 .50
2 ¹⁰ .24	2 .26	2 .28	3 .30	3 .32	4 .34	4 .36	5 .40	5 .44	7 .55
3 .24	3 ¹⁰ .26	3 .28	4 .30	4 .32	5 .34	5 .36	6 .42	6 .46	8 ¹⁰ .60
4 .24	4 .26	4 ¹⁰ .28	5 ¹⁰ .30	5 .32	6 .36	6 .38	7 .44	7 .48	9 .65
	5 .26	5 .28	6 .32	6 ¹⁰ .34	7 ¹⁰ .38	7 ¹⁰ .40	8 ¹⁰ .46	8 ¹⁰ .50	10 .70
	6 .28	6 .30	7 .34	7 .36	8 .40	8 .44	9 .50	9 .55	11 .75
	7 .30	7 .32	8 .36	8 .38	9 .44	9 .46	10 .55	10 .60	12 .80
	8 .32	8 .34	9 .38	9 .40	10 .46	10 .50	11 .60	11 .65	14 ⁵ 1.00
		9 .36	10 .40	10 .42	11 .50	11 .55	12 .65	12 .70	16 1.20
		10 .38	11 .42	11 .46	12 .55	12 .60	14 .80	14 .90	18 1.35
			12 .46	12 .50	14 .70	14 .75	16 1.00	16 ⁵ 1.10	20 1.75
				14 .65		16 .90	18 ⁵ 1.15	18 1.25	
							20 1.60		
2 Inch	$2\frac{1}{4}$ Inch	$2\frac{1}{2}$ Inch	$2\frac{3}{4}$ Inch	3 Inch	$3\frac{1}{2}$ Inch	4 Inch	$4\frac{1}{2}$ Inch	5 Inch	
No. \$	No. \$	No. \$	No. \$	No. \$	No. \$	No. \$	No. \$	No. \$	
6 .55	6 .60	6 .65	8 .75	8 .80	10 1.25	12 1.90	14 2.60	14 2.90	
7 .60	7 .65	7 .70	9 .80	9 .85	11 1.40	14 2.30	16 ¹ 3.00	16 ¹ 3.30	
8 .65	8 .70	8 .75	10 .90	10 1.00	12 ¹ 1.60	16 ¹ 2.70	18 3.50	18 4.00	
9 ⁵ .70	9 ⁵ .75	9 ⁵ .80	11 ¹ 1.00	11 ¹ 1.15	14 2.00	18 3.10	20 4.10	20 4.70	
10 .75	10 .80	10 .85	12 1.10	12 1.35	16 2.40	20 3.60	24 5.60	24 6.20	
11 .80	11 .85	11 .90	14 1.45	14 1.70	18 2.80	24 5.10			
12 .85	12 .90	12 1.00	16 1.80	16 2.05	20 3.20				
14 1.10	14 1.20	14 1.30	18 2.20	18 2.50	24 4.50				
16 1.30	16 1.40	16 1.60	20 2.60	20 2.90					
18 1.45	18 1.60	18 ¹ 1.90		24 4.00					
20 1.95	20 ¹ 2.05	20 2.30							

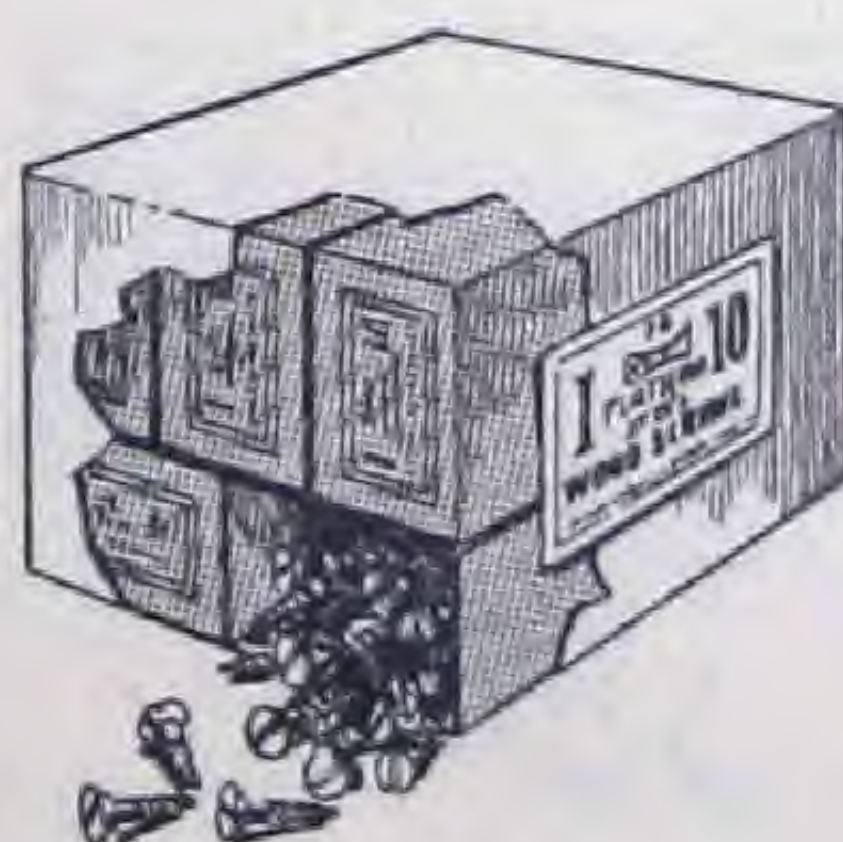
Lengths and diameters not listed are special; but are furnished to the extent they may be in stock, or when required in sufficient quantities of a size to warrant being made to order. Such non-listed lengths and diameters take the list prices of the next longer or larger listed sizes plus an extra for special manufacture.

We also manufacture Square and Hexagon Head Wood Screws and other special Wood Screws to order.

Prices furnished on application.

SCREW GAUGES

Wood Screw Gauges referred to are known as the S.G. and are followed by screw manufacturers throughout Canada and the United States. Decimal equivalents will be found under Explanation of Gauges number 7 on gauge list.



PACKING

All sizes shown on this page are put up in one gross packages. In the case of the smaller sizes these packages are arranged again in larger complements, the number of gross in a package is indicated by the small figures inserted in the price list above. The division is made by a line.



BRASS AND BRONZE WOOD SCREWS

The following styles of Brass and Bronze Screws are invoiced from this list at varying discounts.



Flat Head Round Head Oval Head Fillister Head

Brass Screws also furnished in the following finishes

Black Nickeled Bronze Plated Cadmium Plated Chromium Plated Nickel Plated Polished Silver Plated

Variations in the above finishes will also be considered.

PRICE PER GROSS

Adopted February 13th, 1928.

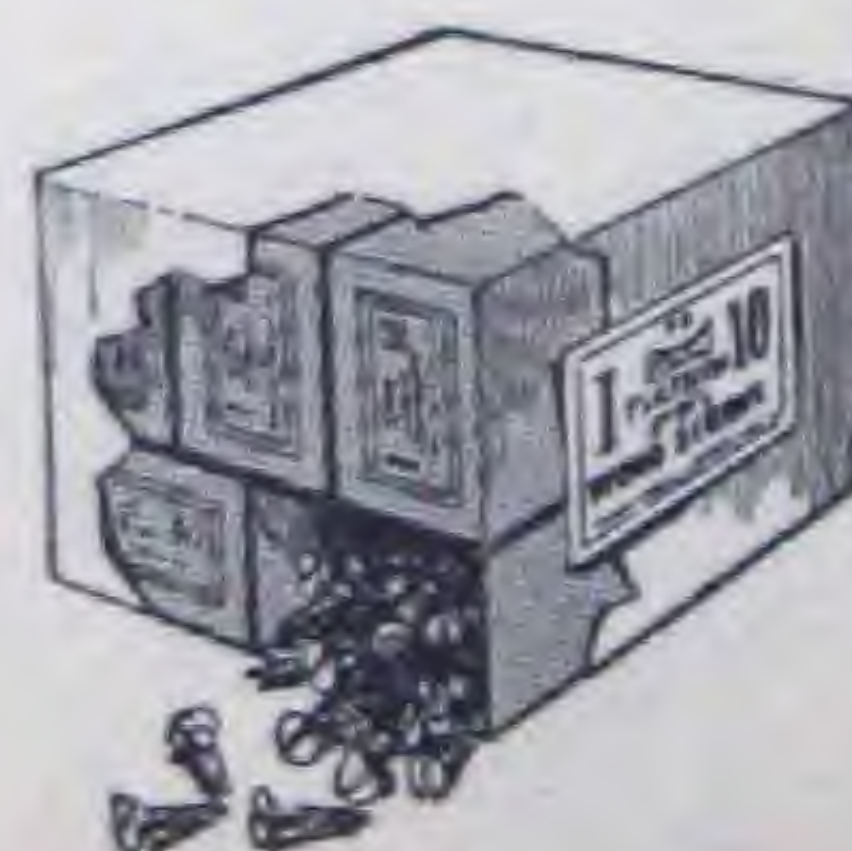
$\frac{1}{4}$ Inch	$\frac{3}{8}$ Inch	$\frac{1}{2}$ Inch	$\frac{5}{8}$ Inch	$\frac{3}{4}$ Inch	$\frac{7}{8}$ Inch	1 Inch	$1\frac{1}{4}$ Inch
No. \$	No. \$	No. \$	No. \$	No. \$	No. \$	No. \$	No. \$
1 .28	1 .30	1 .34	2 .38	2 .42	4 .55	4 .60	6 .90
2 ¹⁰ .30	2 ¹⁰ .32	2 .36	3 .40	3 .45	5 .60	5 .70	7 1.00
3 .32	3 .34	3 ¹⁰ .38	4 ¹⁰ .45	4 .50	6 ¹⁰ .70	6 ¹⁰ .80	8 ¹⁰ 1.10
4 .34	4 .36	4 .40	5 .50	5 ¹⁰ .55	7 .80	7 .90	9 1.25
	5 .40	5 .45	6 .55	6 .60	8 .90	8 1.00	10 1.40
	6 .45	6 .50	7 .60	7 .70	9 1.00	9 1.10	11 1.55
		7 .55	8 .70	8 .80	10 1.10	10 1.20	12 1.80
		8 .65	9 .80	9 .90	11 1.20	11 1.30	14 2.30
			10 .90	10 1.00	12 1.40	12 1.55	
				11 1.10		14 1.95	
				12 1.25			
$1\frac{1}{2}$ Inch	$1\frac{3}{4}$ Inch	2 Inch	$2\frac{1}{4}$ Inch	$2\frac{1}{2}$ Inch	3 Inch	$3\frac{1}{2}$ Inch	
No. \$	No. \$	No. \$	No. \$	No. \$	No. \$	No. \$	
6 1.00	8 1.45	8 1.65	10 2.30	10 2.55	12 3.90	12 4.80	
7 1.20	9 ¹⁰ 1.65	9 1.85	11 ⁵ 2.55	11 2.80	14 4.95	14 6.00	
8 1.30	10 1.85	10 2.05	12 3.00	12 ⁵ 3.25	16 ¹ 5.90	16 ¹ 7.10	
9 ¹⁰ 1.40	11 2.05	11 ⁵ 2.30	14 3.65	14 4.25	18 7.20	18 8.75	
10 1.65	12 ⁵ 2.40	12 2.70	16 4.45	16 5.00			
11 1.80	14 3.00	14 3.45	18 ¹ 5.40	18 ¹ 6.00			
12 2.10		16 4.10					
14 ⁵ 2.65		18 4.80					

Lengths and diameters not listed are special; but are furnished to the extent they may be in stock, or when required in sufficient quantities of a size to warrant being made to order. Such non-listed lengths and diameters take the list prices of the next longer or larger listed sizes plus an extra for special manufacture.

PACKING

All sizes shown on this page are put up in one gross packages. In the case of the smaller sizes these packages are arranged again in larger complements, the number of gross in a package is indicated by the small figures inserted in the price list above. The division is made by a line.

For weights of Brass or Bronze Screws add 7 $\frac{1}{10}$ % to weights of Steel Screws shown on the next page.



STEEL WOOD SCREWS—Cont'd

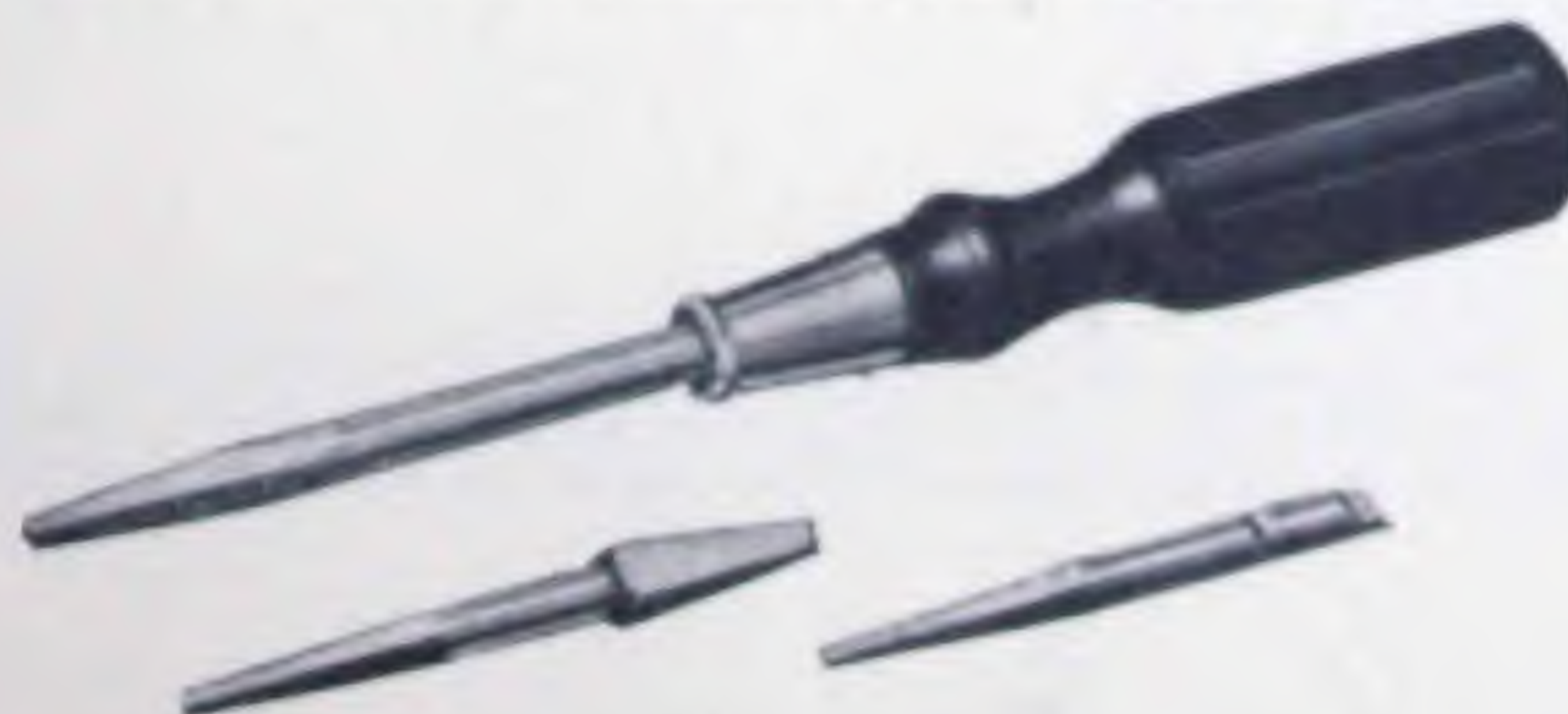
Approximate Weight per Gross

$\frac{1}{4}$ Inch	$\frac{3}{8}$ Inch	$\frac{1}{2}$ Inch	$\frac{5}{8}$ Inch	$\frac{3}{4}$ Inch	$\frac{7}{8}$ Inch	1 Inch	$1\frac{1}{4}$ Inch	$1\frac{1}{2}$ Inch	$1\frac{3}{4}$ Inch
No. lb.	No. lb.	No. lb.	No. lb.	No. lb.	No. lb.	No. lb.	No. lb.	No. lb.	No. lb.
1 .0391	1 .0545	1 .0694		2 .1369		3 .2302	4 .3684	4 .4374	6 .7850
2 .0562	2 .0773	2 .0978	2 .1177	3 .1801	3 .2034	4 .2994	5 .4649	5 .5514	7 .9485
3 .0764	3 .1039	3 .1303	3 .1557	4 .2304	4 .2649	5 .3785	6 .5734	6 .6792	8 1.1283
4 .0992	4 .1331	4 .1654	4 .1959	5 .2921	5 .3353	6 .4676	7 .6942	7 .8213	9 1.3248
	5 .1677	5 .2056	5 .2489	6 .3618	6 .4147	7 .5671	8 .8275	8 .9779	10 1.5382
	6 .2031	6 .2560	6 .3089	7 .4395	7 .5035	8 .6770	9 .9734	9 1.1491	11 1.7687
	7 .2492	7 .3128	7 .3763	8 .5266	8 .6018	9 .7978	10 1.1324	10 1.3353	12 2.0166
	8 .3009	8 .3762	8 .4514	9 .6221	9 .7099	10 .9295	11 1.3046	11 1.5367	14 2.5653
		9 .4464	9 .5342	10 .7266	10 .8281	11 1.0725	12 1.4902	12 1.7534	16 3.1865
		10 .5237	10 .6252	11 .8404	11 .9565	12 1.2270	14 1.9027	14 2.2340	18 3.8816
			11 .7244	12 .9638	12 1.0954	14 1.5714	16 2.3720	16 2.7793	20 4.6529
			12 .8322	14 1.2400	14 1.4057	16 1.9647	18 2.8994	18 3.3905	
								20 4.0702	
2 Inch	$2\frac{1}{4}$ Inch	$2\frac{1}{2}$ Inch	$2\frac{3}{4}$ Inch	3 Inch	$3\frac{1}{2}$ Inch	4 Inch	$4\frac{1}{2}$ Inch	5 Inch	
No. lb.	No. lb.	No. lb.	No. lb.	No. lb.	No. lb.	No. lb.	No. lb.	No. lb.	
6 .8908	6 1.0000	6 1.3000	8 1.9000	8 2.0400	10 2.9585	12 4.3854	14 6.5000	14 7.2200	
7 1.0756	7 1.2400	7 1.4200	9 2.1400	9 2.2500	11 3.3932	14 5.5473	16 7.6667	16 9.1250	
8 1.2788	8 1.4292	8 1.5796	10 2.3498	10 2.5527	12 3.8590	16 6.8522	18 9.2836	18 10.2657	
9 1.5005	9 1.6762	9 1.8519	11 2.6970	11 2.9291	14 4.8846	18 8.3014	20 11.0628	20 12.2282	
10 1.7411	10 1.9440	10 2.1469	12 3.0694	12 3.3326	16 6.0376	20 9.8973	24 15.1156	24 16.6945	
11 2.0008	11 2.2329	11 2.4649	14 3.8906	14 4.2220	18 7.3192	24 13.5366			
12 2.2798	12 2.5430	12 2.8062	16 4.8157	16 5.2230	20 8.7319				
14 2.8966	14 3.2280	14 3.5593	18 5.8460	18 6.3370	22 10.2774				
16 3.5938	16 4.0011	16 4.4084	20 6.9838	20 7.5665	24 11.9577				
18 4.3727	18 4.8638	18 5.3549		22 8.9131					
20 5.2356	20 5.8183	20 6.4010		24 10.3787					

CASE HARDENED ROLLED THREAD SCREWS

We are equipped to manufacture case hardened rolled thread screws in a range of sizes. Full details and prices will be furnished on application. Measurements for length are the same as Machine Screws.

DRIVERS FOR SOCKET HEAD WOOD SCREWS



Drivers are carried in stock for all sizes of Socket Head Wood Screws manufactured and can be supplied in the following styles:—

Regular Hand Drivers
Automatic Hand Drivers

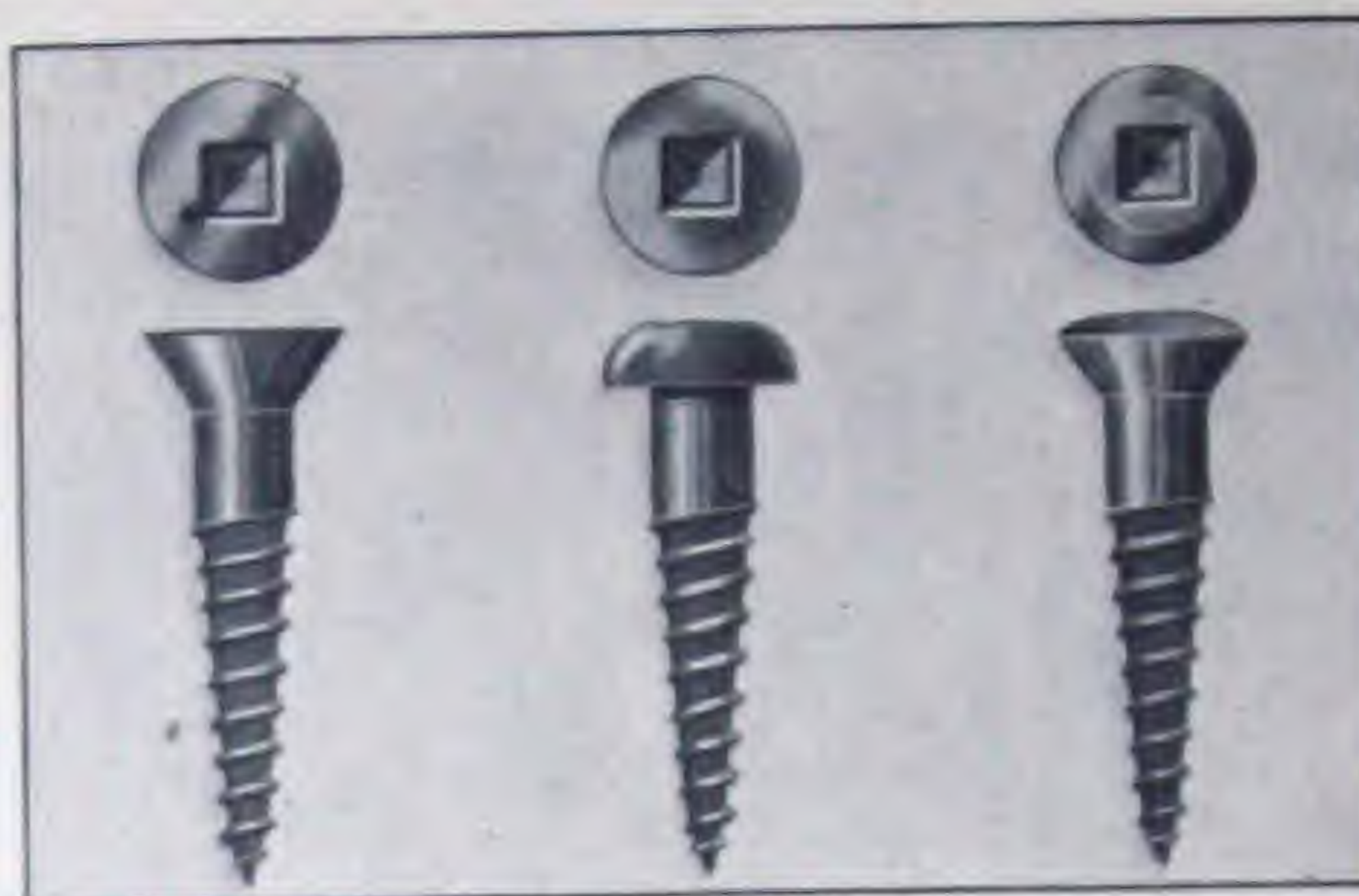
Electricians Hand Drivers
Brace Bits

also Electric Power Bits for standard equipment.

Price for any style or size bit will be furnished on application.

SOCKET HEAD STEEL WOOD SCREWS

The following styles of Steel Socket Head Wood Screws are invoiced from this list at varying discounts.



Flat Head Round Head Oval Head

This style of Wood Screw can be furnished in the same variety of finishes as shown under Slotted Head Wood Screws.

PRICE PER GROSS

Adopted July 6th, 1922.

$\frac{3}{8}$ Inch	$\frac{1}{2}$ Inch	$\frac{5}{8}$ Inch	$\frac{3}{4}$ Inch	$\frac{7}{8}$ Inch	1 Inch	$1\frac{1}{4}$ Inch	$1\frac{1}{2}$ Inch	$1\frac{3}{4}$ Inch	2 Inch
No. \$	No. \$	No. \$	No. \$	No. \$	No. \$	No. \$	No. \$	No. \$	No. \$
4 .90	4 .90	4 .90	4 .95	4 .95	4 1.00	4 1.10	4 1.20	6 1.40	6 1.55
5 .90	5 .90	5 .95	5 .95	5 1.00	5 1.05	5 1.15	5 1.25	7 1.45	7 1.60
6 .90	6 .90	6 .95	6 1.00	6 1.05	6 1.10	6 1.20	6 1.30	8 1.50	8 1.65
7 .90	7 .95	7 1.00	7 1.05	7 1.10	7 1.15	7 1.25	7 1.35	9 1.60	9 1.75
8 .90	8 1.00	8 1.05	8 1.10	8 1.15	8 1.20	8 1.30	8 1.40	10 1.70	10 1.85
	9 1.05	9 1.10	9 1.15	9 1.20	9 1.25	9 1.35	9 1.45	11 1.80	11 2.00
	10 1.10	10 1.15	10 1.20	10 1.25	10 1.30	10 1.40	10 1.50	12 2.00	12 2.20
		11 1.20	11 1.25	11 1.30	11 1.35	11 1.50	11 1.60	14 2.25	14 2.50
		12 1.25	12 1.30	12 1.35	12 1.40	12 1.60	12 1.80	16 2.60	16 2.90
			14 1.40	14 1.50	14 1.60	14 1.80	14 2.05	18 3.05	18 3.40
					16 1.85	16 2.05	16 2.35	20 3.60	20 4.00
						18 2.40	18 2.75		
							20 3.25		
$2\frac{1}{4}$ Inch	$2\frac{1}{2}$ Inch	$2\frac{3}{4}$ Inch	3 Inch						
No. \$	No. \$	No. \$	No. \$						
6 1.75	6 1.95	8 2.15	8 2.45						
7 1.80	7 2.00	9 2.25	9 2.55						
8 1.85	8 2.05	10 2.45	10 2.65						
9 1.95	9 2.15	11 2.60	11 2.80						
10 2.05	10 2.25	12 2.80	12 3.00						
11 2.20	11 2.40	14 3.25	14 3.50						
12 2.40	12 2.60	16 3.80	16 4.10						
14 2.75	14 3.00	18 4.45	18 4.80						
16 3.20	16 3.50	20 5.20	20 5.60						
18 3.75	18 4.10								
20 4.40	20 4.80								

Lengths and diameters not listed are special; but are furnished to the extent they may be in stock, or when required in sufficient quantities of a size to warrant being made to order. Such non-listed lengths and diameters take the list price of the next longer or larger listed sizes plus an extra for special manufacture.

WEIGHTS

For approximate weight per gross, use weights of Slotted Head Wood Screws.



PACKING

Socket Head Screws are usually supplied in bulk, but can also be furnished in one gross packages.



SOCKET HEAD BRASS AND BRONZE WOOD SCREWS

and Screws are invoiced from this list at varying discounts.



Hex Head Oval Head

AND IN THE FOLLOWING FINISHES

and Chromium Plated Nickel Plated Polished
Plated

Others will also be considered.

PER GROSS

July 6, 1922.

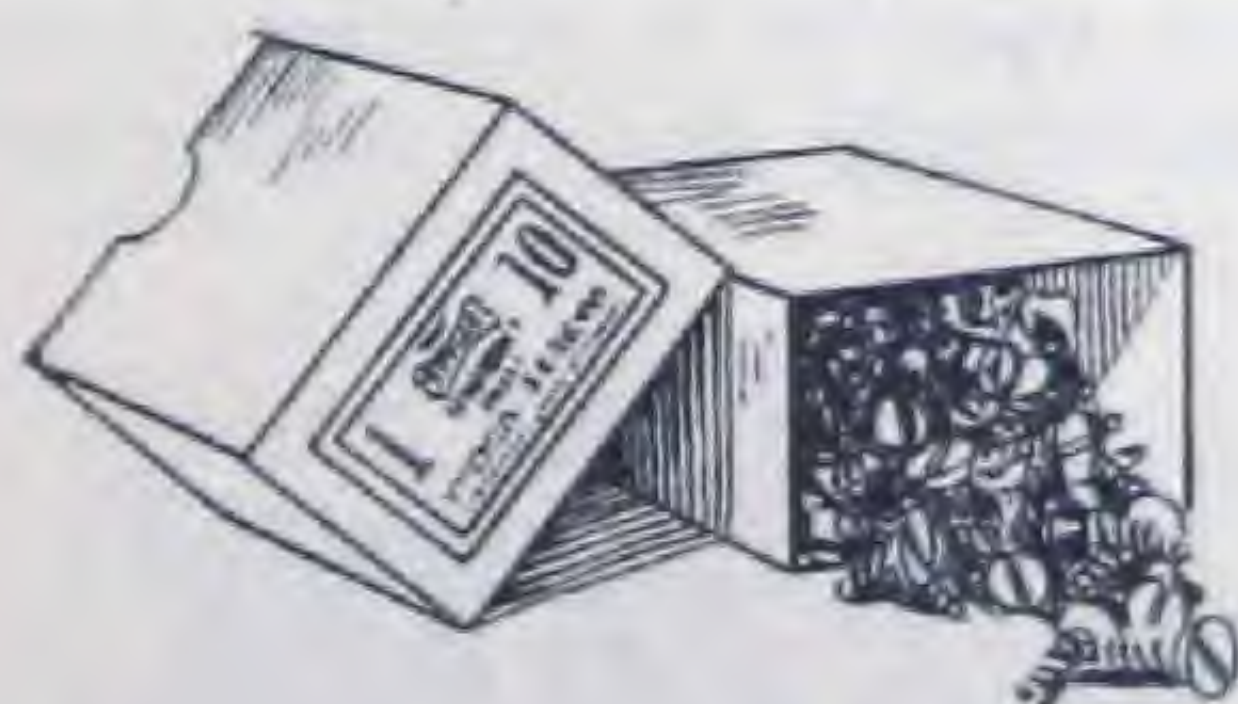
1 Inch		1 1/4 Inch		1 1/2 Inch		1 3/4 Inch		2 Inch	
No.	\$	No.	\$	No.	\$	No.	\$	No.	\$
4	1.60	6	2.30	6	2.65	8	3.75	8	4.25
5	1.80	7	2.60	7	3.00	9	4.25	9	4.75
6	2.00	8	2.95	8	3.35	10	4.80	10	5.35
7	2.25	9	3.30	9	3.75	11	5.40	11	6.00
8	2.55	10	3.65	10	4.20	12	6.10	12	6.80
9	2.85	11	4.10	11	4.70	14	7.45	14	8.35
10	3.15	12	4.60	12	5.35			16	10.20
11	3.50	14	5.65	14	6.55			18	12.30
12	3.90								
14	4.75								

11	6.70	11	7.40	14	12.00
12	7.50	12	8.25	16	14.70
14	9.30	14	10.25	18	17.70
16	11.30	16	13.00		
18	13.60	18	15.00		

Lengths and diameters not listed are special; but are furnished to the extent they may be in stock, or when required in sufficient quantities of a size to warrant being made to order. Such non-listed lengths and diameters take the list prices of the next longer or larger listed sizes plus an extra for special manufacture.

WEIGHTS

For weights of Brass or Bronze Screws add 7 1/10% to Weights of Steel Wood Screws.



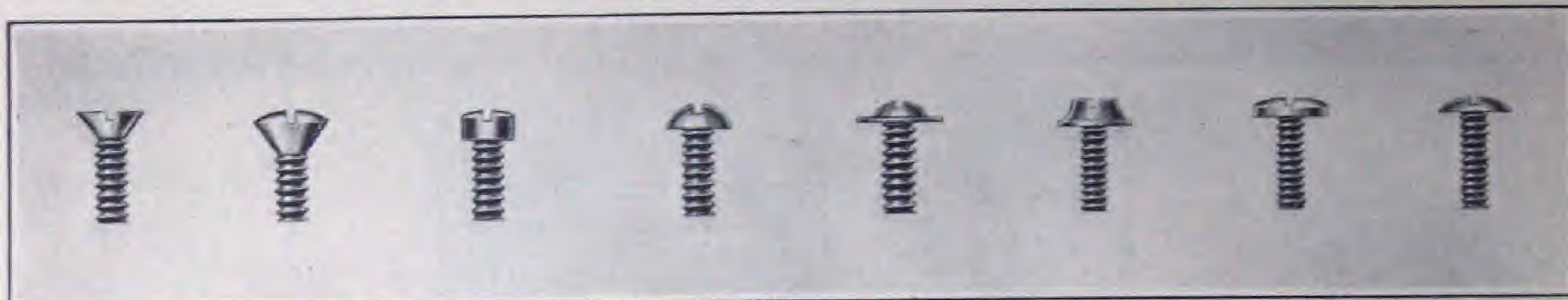
PACKING

Socket Head Screws are usually supplied in bulk but can also be furnished in one gross packages.



STEEL MACHINE SCREWS

The following styles of Steel Machine Screws are invoiced from this list at varying discounts.



Flat Head Oval Countersunk Head Fillister Head Round Head Washer Head Cock Screw Head Binding Head Tapered Sides Binding Head

Steel Machine Screws can be supplied in a variety of finishes—see list of finishes under Steel Wood Screws.
Price per Gross Adopted May 23rd, 1928.

Threads Per Inch C.E.S.A. Standard	Common	56	48	40	32	32	24	24	20	18	16
	Less Common	64	56	48	40	36	32	28	28	24	24
Diameter		2	3	4	6	8	10	12	1/4	5/16	3/8
Length		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1/8		.24	.25	.26	.28						
3/16		.25	.26	.27	.29	.35	.45				
1/4		.26	.27	.28	.30	.36	.46	.64			
5/16		.27	.28	.29	.31	.37	.48	.66	.80		
3/8		.28	.29	.30	.32	.39	.50	.68	.84	1.55	
7/16		.29	.30	.31	.34	.41	.52	.70	.88	1.60	
1/2		.30	.31	.32	.36	.43	.54	.74	.92	1.65	2.20
5/8		.32	.33	.34	.40	.47	.58	.82	1.00	1.75	2.40
3/4		.33	.34	.36	.43	.49	.62	.86	1.05	1.80	2.50
7/8		.34	.36	.38	.46	.53	.66	.92	1.10	1.90	2.65
1				.42	.50	.57	.70	.98	1.20	2.00	2.85
1 1/8				.46	.54	.63	.76	1.04	1.30	2.10	3.05
1 1/4				.52	.58	.69	.82	1.10	1.40	2.25	3.25
1 1/2				.60	.68	.82	.95	1.24	1.60	2.45	3.55
1 3/4					.82	.95	1.12	1.40	1.80	2.75	3.95
2					.96	1.08	1.30	1.60	2.00	3.05	4.40
2 1/4						1.25	1.50	1.80	2.25	3.35	4.85
2 1/2						1.45	1.70	2.05	2.50	3.65	5.40
2 3/4						1.65	1.95	2.30	2.75	4.00	6.00
3						1.85	2.15	2.60	3.10	4.40	6.60

Lengths and diameters not listed, and not ordered in manufacturing quantities, will be supplied at list price of next longer or larger size, plus net extras as shown below.

Specials ordered will be charged at list prices and discounts plus EXTRAS as follows:
On Steel Screws with any style Head and for sizes not listed.

Under 25 gross	\$5.00 Net
25 to 49 gross	4.00 "
50 to 99 gross	3.00 "
100 gross and over	No extra

If tools are not on hand for SPECIALS ordered, charge for these will be made in addition to the above extras.

All Standard Machine Screws are supplied with rolled threads.

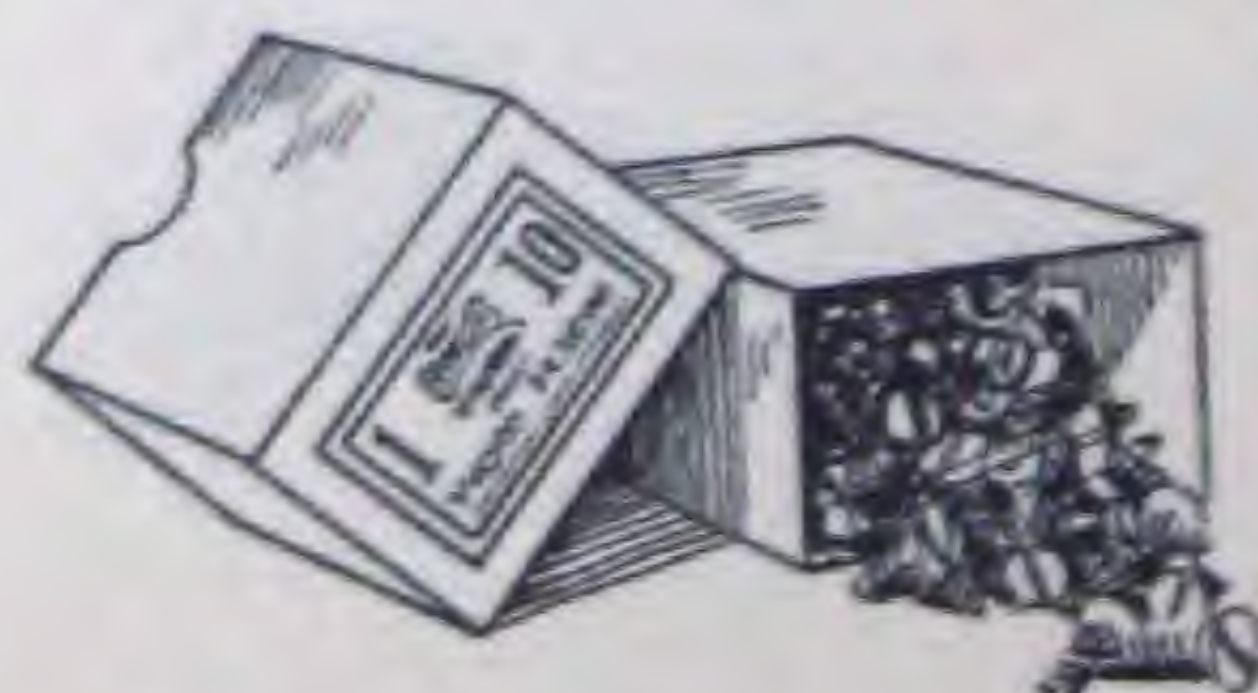
All Machine Screws 3/4" and longer are threaded for a minimum length of 1 3/4", unless otherwise specified.

Threads longer than standard are subject to price on application.

Cut thread Machine Screws can be made to order and are subject to prices which will be quoted on application.

SCREW GAUGES

Machine Screw Gauges referred to are known as the S.G. and are followed by screw manufacturers throughout Canada and the United States. Decimal equivalents will be found under Explanation of Gauges at the beginning of Wire Section.



PACKING

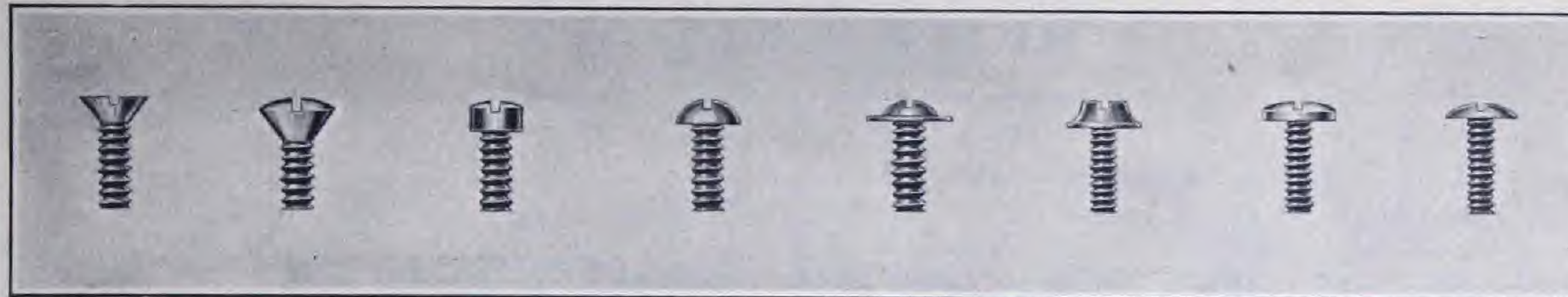
All sizes of Machine Screws are put up in gross packages but will also be supplied in bulk when specified.

For dimensions of Machine Screw Threads see C.E.S.A. Standard Threads page 59



BRASS MACHINE SCREWS

The following styles of Brass Machine Screws are invoiced from this list at varying discounts.



Flat Head Oval Countersunk Head Fillister Head Round Head Washer Head Cock Screw Head Binding Head Tapered Sides Binding Head

Brass Machine Screws can be supplied in a variety of finishes—See list of finishes under Brass Wood Screws.

Price List Adopted May 23rd, 1928

Threads Per inch C.E.S.A. Standard	Common	56	48	40	32	32	24	24	20	18	16
	Less Common	64	56	48	40	36	32	28	28	24	24
Diameter		2	3	4	6	8	10	12	1/4	5/16	3/8
Length		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1/8		.28	.34	.40	.52						
3/16		.30	.36	.42	.54	.70	.95				
1/4		.32	.38	.44	.58	.76	1.05	1.60			
5/16		.34	.40	.46	.62	.82	1.15	1.70	2.30		
3/8		.36	.42	.48	.66	.88	1.25	1.80	2.40	4.60	
7/16		.38	.44	.50	.70	.94	1.35	1.90	2.50	4.80	
1/2		.40	.46	.54	.76	1.02	1.45	2.00	2.65	5.00	7.10
5/8		.44	.52	.62	.92	1.20	1.75	2.20	2.95	5.40	7.70
3/4		.50	.58	.68	1.00	1.30	1.90	2.40	3.15	5.80	8.20
7/8		.56	.66	.74	1.10	1.45	2.05	2.60	3.45	6.30	8.90
1				.82	1.20	1.60	2.20	2.80	3.75	6.80	9.60
1 1/8				.90	1.30	1.75	2.35	3.00	4.05	7.30	10.30
1 1/4				1.00	1.45	1.90	2.55	3.25	4.35	7.80	11.00
1 1/2				1.25	1.65	2.15	2.90	3.75	4.95	8.50	12.10
1 3/4					1.95	2.45	3.35	4.25	5.55	9.30	13.40
2					2.25	2.75	3.80	4.75	6.15	10.40	14.70
2 1/4						3.10	4.25	5.25	6.75	11.50	16.20
2 1/2						3.45	4.75	5.75	7.35	12.60	17.80
2 3/4						3.80	5.25	6.25	8.00	13.70	19.50
3						4.15	5.75	6.75	8.65	14.90	21.60

Lengths and diameters, not listed, and not ordered in manufacturing quantities, will be supplied at list price of next longer or larger size, plus net extras as shown below.

Specials ordered will be charged at list prices and discounts plus EXTRAS as follows:

On Brass Screws with any style Head and for sizes not listed.

Under 25 gross	\$5.00 Net
25 to 49 gross	4.00 "
50 to 99 gross	3.00 "
100 gross and over	No extra

If tools are not on hand for SPECIALS ordered, charge for these will be made in addition to the above extras.

All Standard Machine Screws are supplied with rolled threads.

All Machine Screws 1 3/4" and longer are threaded for a minimum length of 1 3/4", unless otherwise specified.

Threads longer than standard are subject to price on application.

Cut thread Machine Screws can be made to order and are subject to prices which will be quoted on application.

SCREW GAUGES

Machine Screw Gauges referred to are known as the S.G. and are followed by screw manufacturers throughout Canada and the United States. Decimal equivalents will be found under Explanation of Gauges at the beginning of Wire Section.



PACKING

All sizes of Machine Screws are put up in gross packages but will also be supplied in bulk when specified.

For dimensions of Machine Screw Threads see C.E.S.A. Standard Threads, page 59.

MACHINE SCREWS—Cont'd

KNOB SCREWS



$\frac{3}{8}$ " x 9 gauge 24 threads to the inch

Made in brass and bronze in any finish; or in steel bright or any finish desired.

Supplied in gross packages or in bulk.
Prices on application.

LOCK CAP SCREWS



$\frac{3}{8}$ " x 8 gauge 32 threads to the inch

Made in brass and bronze in any finish; or in steel bright or any finish desired.

Supplied in gross packages or in bulk.
Prices on application.

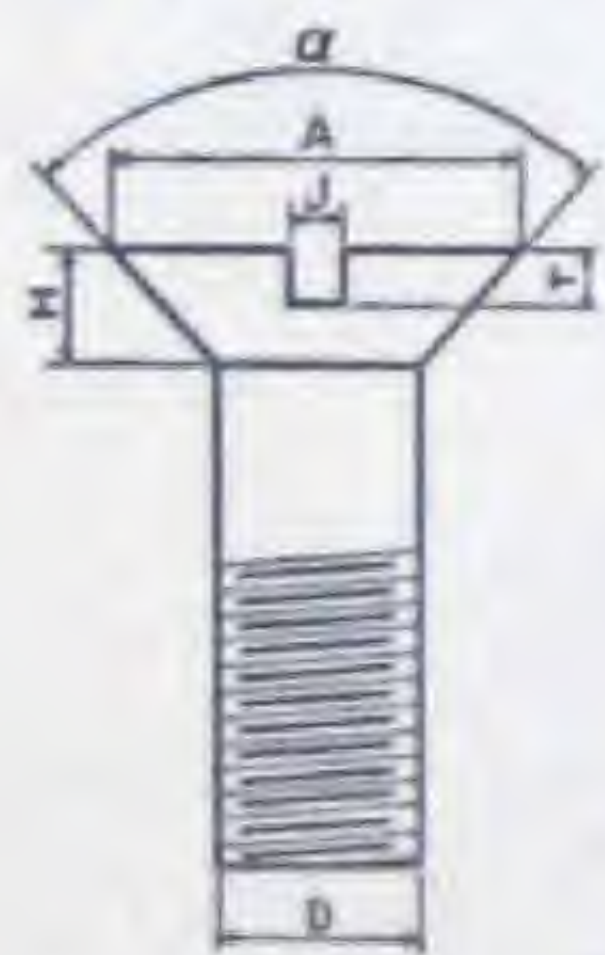
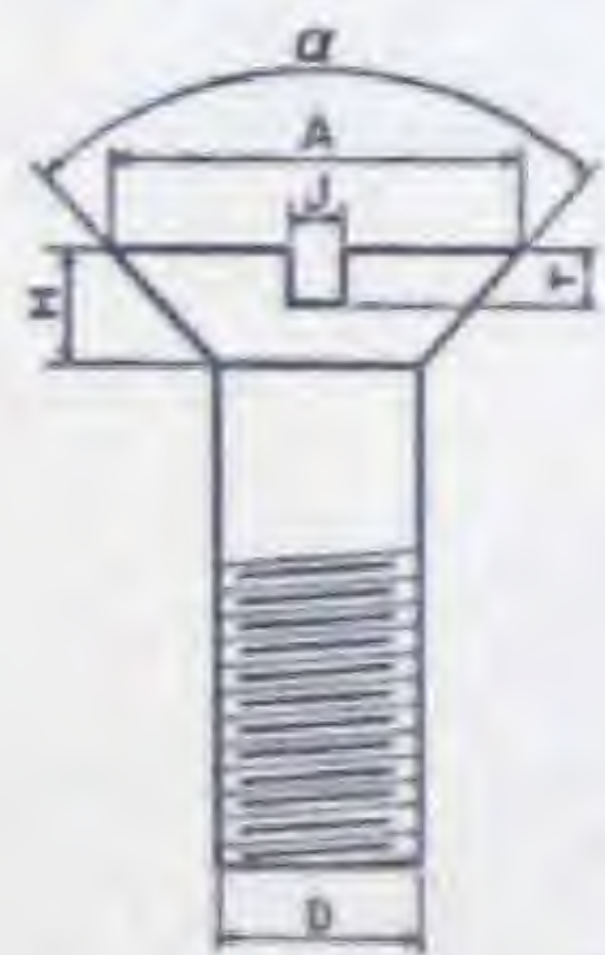
SHADE HOLDER SCREWS



Shade Holder Screws with knurled head can be made in any of the regular standard machine screw sizes. Supplied either steel or brass, plain or in any of the various finishes listed under Wood Screws. For prices use the Machine Screw List.

MACHINE SCREW STANDARDS

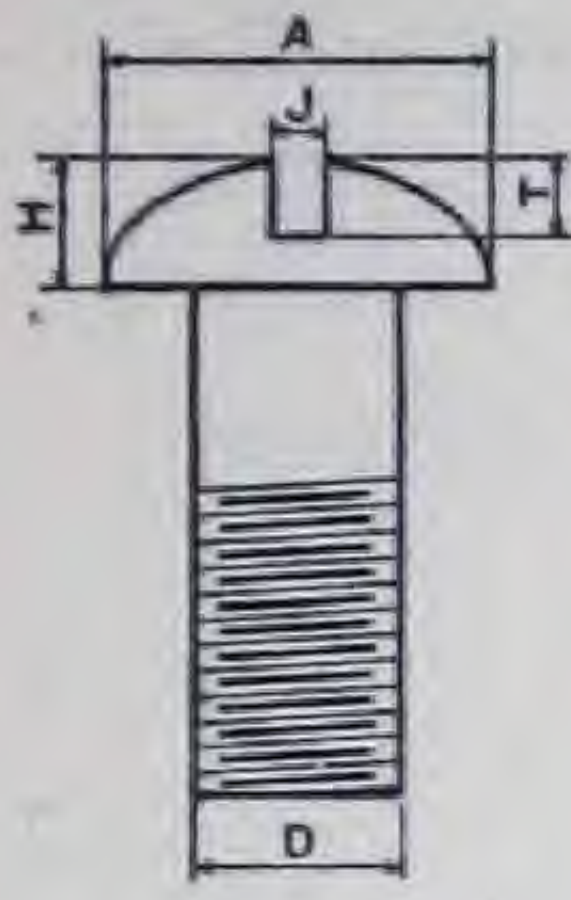
Flat Head Dimensions.

	Nominal Size of Screw	D	A		H		J		T	
		Major Diameter of Thread	Head Diameter		Height of Head		Width of Slot		Depth of Slot	
			Maxi- mum	Mini- mum	Maxi- mum	Mini- mum	Maxi- mum	Mini- mum	Maxi- mum	Mini- mum
 <p>a-Max. 82° Min. 80°</p>	2	.086	.172	.156	.051	.040	.036	.024	.023	.015
	3	.099	.199	.181	.059	.048	.038	.026	.027	.017
	4	.112	.225	.207	.067	.055	.040	.028	.030	.020
	6	.138	.279	.257	.083	.069	.045	.033	.038	.024
	8	.164	.332	.308	.100	.084	.050	.037	.045	.029
	10	.190	.385	.359	.116	.098	.055	.041	.053	.034
	12	.216	.438	.410	.132	.112	.059	.045	.060	.039
	$\frac{1}{4}$	.250	.507	.477	.153	.131	.066	.051	.070	.046
	$\frac{5}{16}$	.3125	.636	.600	.192	.166	.077	.061	.088	.058
	$\frac{3}{8}$	.375	.762	.722	.230	.200	.088	.072	.106	.070

All dimensions in inches.

MACHINE SCREWS—Cont'd

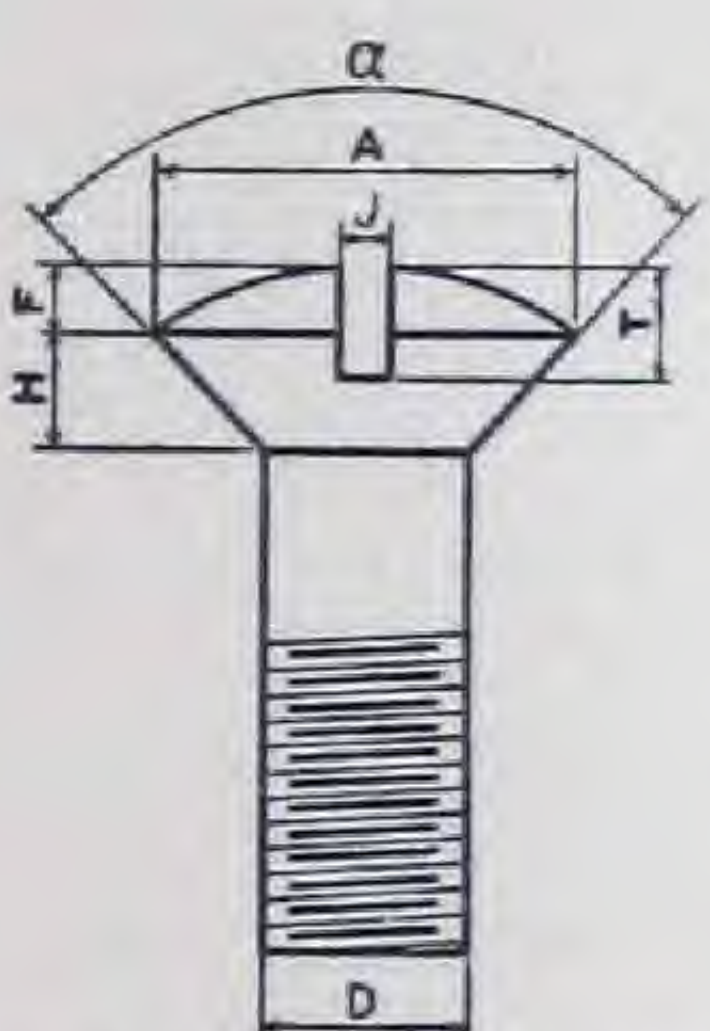
Round Head Dimensions



Nominal Size of Screw	D Major Diameter of Thread	A Head Diameter		H Height of Head		J Width of Slot		T Depth of Slot	
		Maxi- mum	Mini- mum	Maxi- mum	Mini- mum	Maxi- mum	Mini- mum	Maxi- mum	Mini- mum
2	.086	.162	.146	.070	.059	.036	.024	.048	.036
3	.099	.187	.169	.078	.067	.038	.026	.053	.040
4	.112	.211	.193	.086	.075	.040	.028	.058	.043
6	.138	.260	.240	.103	.091	.045	.033	.067	.050
8	.164	.309	.287	.119	.107	.050	.037	.076	.057
10	.190	.359	.334	.136	.124	.055	.041	.086	.064
12	.216	.408	.382	.152	.140	.059	.045	.095	.071
1/4	.250	.472	.443	.174	.161	.066	.051	.108	.080
5/16	.3125	.591	.557	.214	.200	.077	.061	.130	.097
3/8	.375	.708	.670	.254	.239	.088	.072	.153	.114

All dimensions in inches.

Oval Head Dimensions

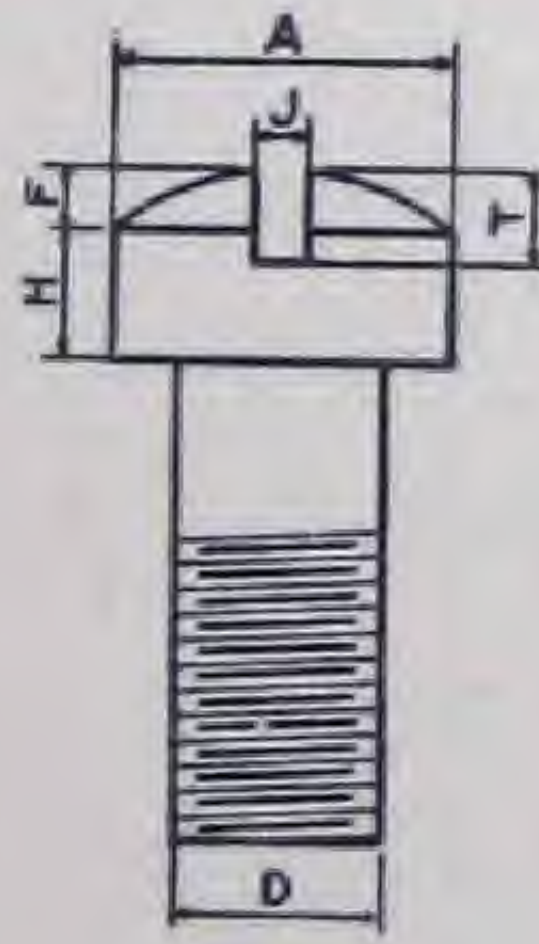


a-Max. 82° Min. 80°

Nominal Size of Screw	D Major Diameter of Thread	A Head Diam.		H Height of Head		J Width of Slot		T Depth of Slot		F Height of Oval		F+H Total Ht. of Head	
		Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
2	.086	.172	.156	.051	.040	.036	.024	.045	.037	.029	.022	.080	.063
3	.099	.199	.181	.059	.048	.038	.026	.052	.043	.033	.026	.092	.073
4	.112	.225	.207	.067	.055	.040	.028	.059	.049	.037	.029	.104	.084
6	.138	.279	.257	.083	.069	.045	.033	.074	.060	.045	.036	.128	.105
8	.164	.332	.308	.100	.084	.050	.037	.088	.072	.053	.043	.152	.126
10	.190	.385	.359	.116	.098	.055	.041	.103	.084	.061	.050	.176	.148
12	.216	.438	.410	.132	.112	.059	.045	.117	.096	.069	.057	.200	.169
1/4	.250	.507	.477	.153	.131	.066	.051	.136	.112	.079	.066	.232	.197
5/16	.3125	.636	.600	.192	.166	.077	.061	.171	.141	.098	.083	.290	.249
3/8	.375	.762	.722	.230	.200	.088	.072	.206	.170	.117	.100	.347	.300

All dimensions in inches.

Fillister Head Dimensions



Nominal Size of Screw	D Major Diameter of Thread	A Head Diam.		H Height of Head		J Width of Slot		T Depth of Slot		F Height of Oval		F+H Total Ht. of Head	
		Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
2	.086	.140	.124	.055	.045	.036	.024	.037	.021	.028	.018	.083	.063
3	.099	.161	.145	.063	.052	.038	.026	.043	.026	.032	.021	.095	.073
4	.112	.183	.166	.072	.060	.040	.028	.048	.031	.035	.024	.107	.084
6	.138	.226	.208	.089	.076	.045	.033	.060	.041	.043	.029	.132	.105
8	.164	.270	.250	.106	.091	.050	.037	.071	.050	.050	.035	.156	.126
10	.190	.313	.292	.123	.107	.055	.041	.083	.060	.057	.041	.180	.148
12	.216	.357	.334	.141	.123	.059	.045	.094	.070	.064	.047	.205	.170
1/4	.250	.414	.389	.163	.143	.066	.051	.109	.083	.074	.054	.237	.197
5/16	.3125	.519	.490	.205	.181	.077	.061	.137	.106	.092	.068	.297	.249
3/8	.375	.622	.590	.246	.218	.088	.072	.164	.129	.109	.082	.355	.300

All dimensions in inches.

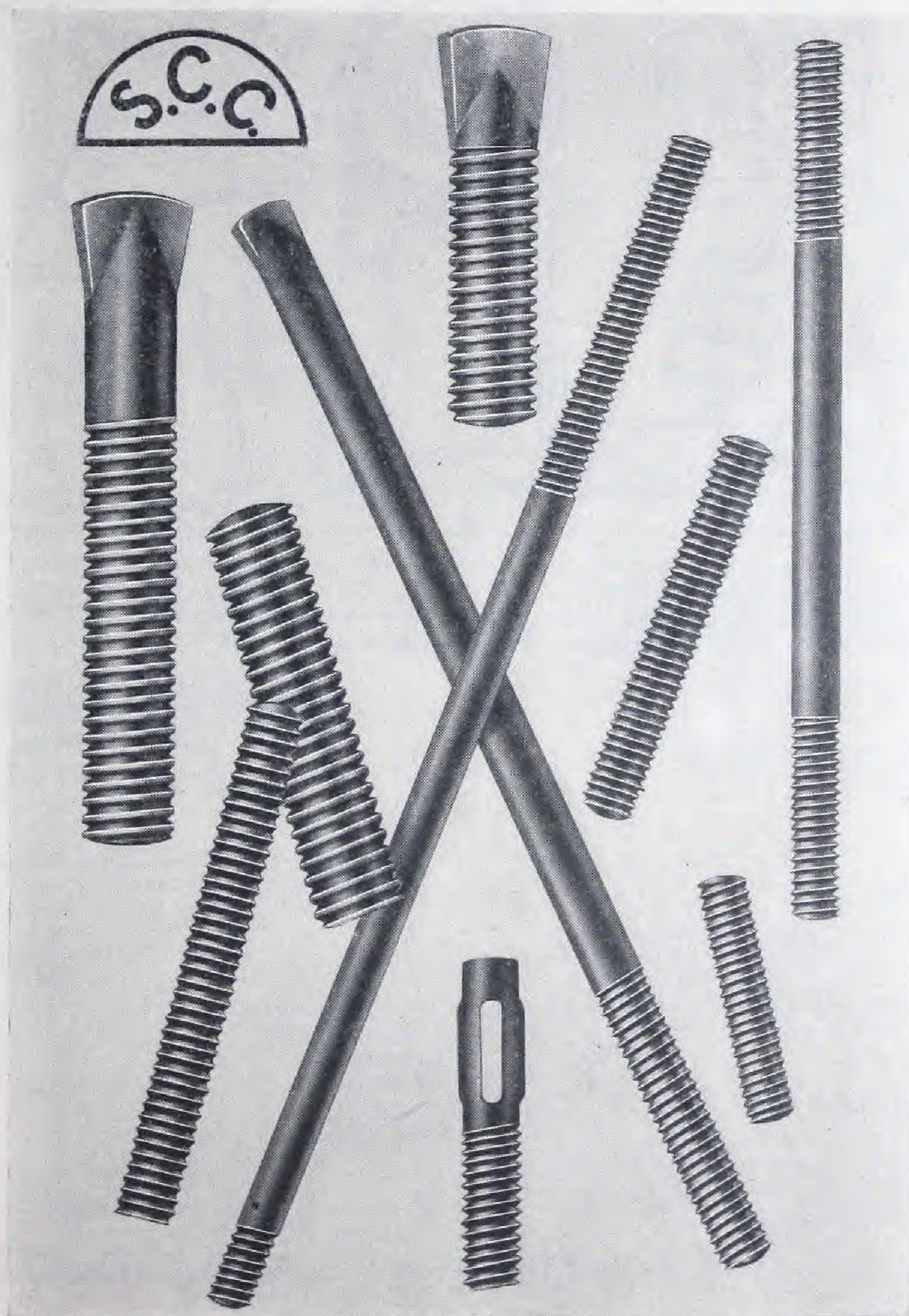


MACHINE SCREWS—*Cont'd*

SPECIAL SCREW MACHINE PRODUCTS

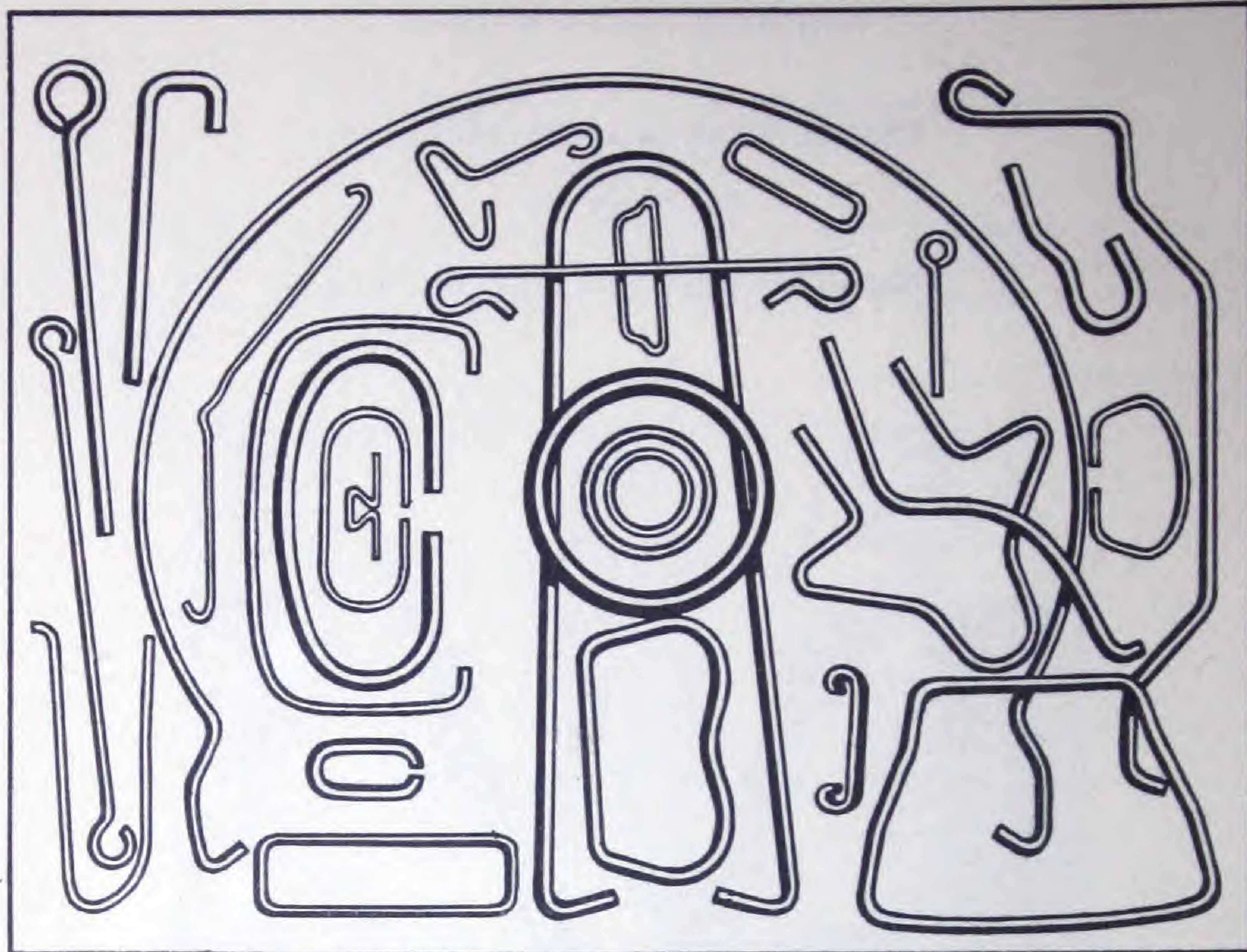
Made to order only

THREADED WIRES FOR SPECIAL WORK





BRIGHT GOODS



In addition to our standard stock lines of Bright Goods, illustrations and descriptions of which appear on the following pages, we can also manufacture a wide variety of special bent wire goods. A few sample pieces are illustrated above to give some idea of the endless range we are able to make. We invite enquiries for quotations on your special requirements.

WIRE HAT AND COAT HOOKS



List Prices per Gross, Discount on Application

Length Inches	Cop- pered	Japan- ned	Brass Plated	Nickel Plated	Tinned
3	\$9.00	\$10.00	\$12.00	\$13.50	..
3 1/2	9.50	..	..	..	..

Brass Hat and Coat Hooks, price on application.
Packed in one-half gross packages.
Twenty-four packages to a case.
All sizes and styles made of No. 10 A.S. & W. Wire
Gauge (.135).

WIRE DOOR PULLS



List prices per Gross, Discount on Application

	Length Centre to Centre of Holes	Price per Gross
Copper Plated	4 1/2	\$4.25
Japanned	4 1/2	4.25
Brass Plated	4 1/2	..
Tinned	4 1/2	6.00
Nickel Plated	4 1/2	6.50

All sizes and styles made of No. 10 A.S. & W. Wire.
Gauge (.135).

Packed in one-half gross packages

STOVE SCRAPERS



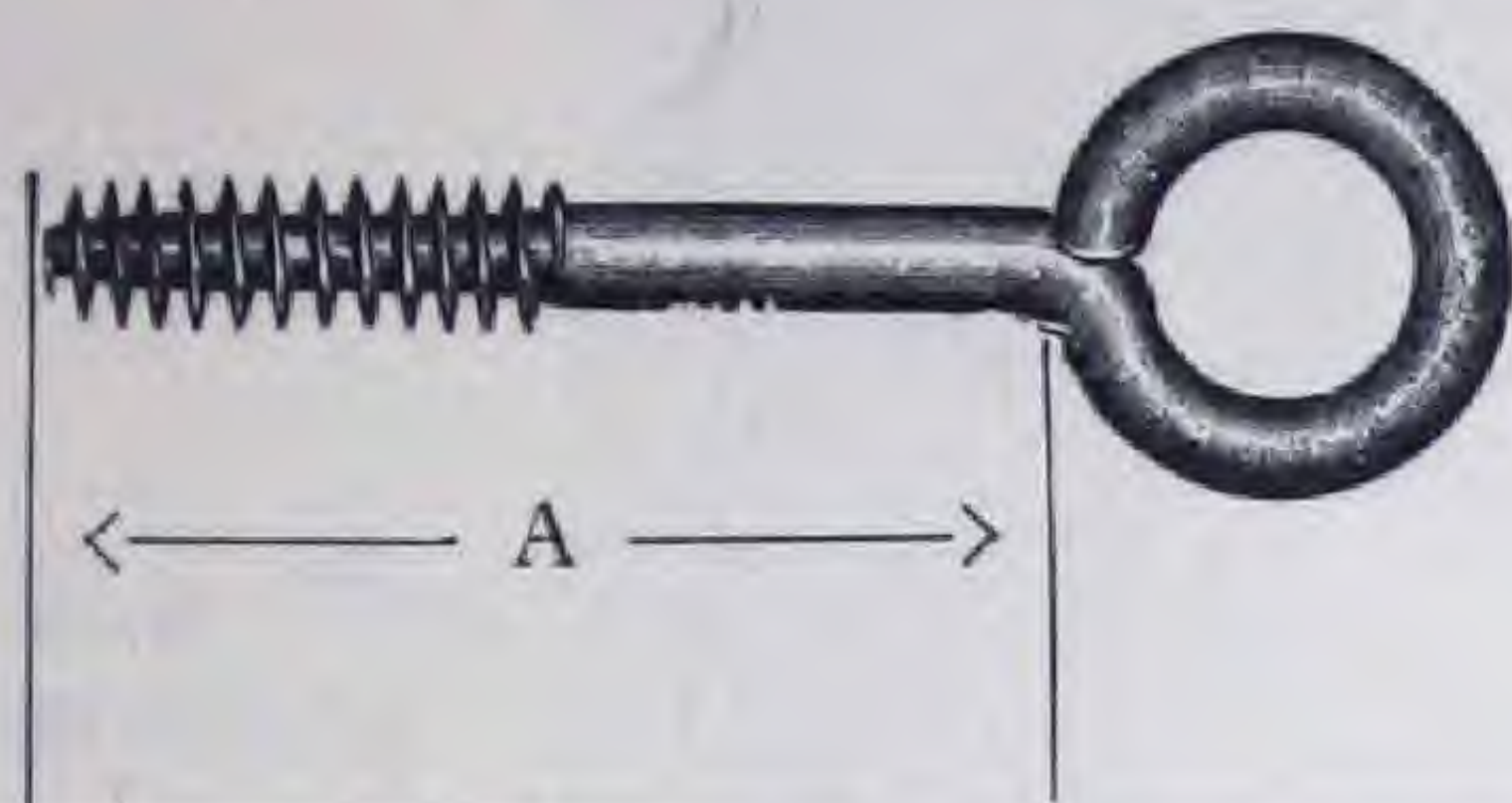
Handles made of S.W.G. No. 8 Steel Wire.
Blades 3" x 1 1/4".

Length, Inches	Price per 1,000
26	\$18.00
28	19.00
30	20.00

Other sizes made to order, prices on application.

BRIGHT GOODS—Cont'd

STOVE PIPE SCREW EYES



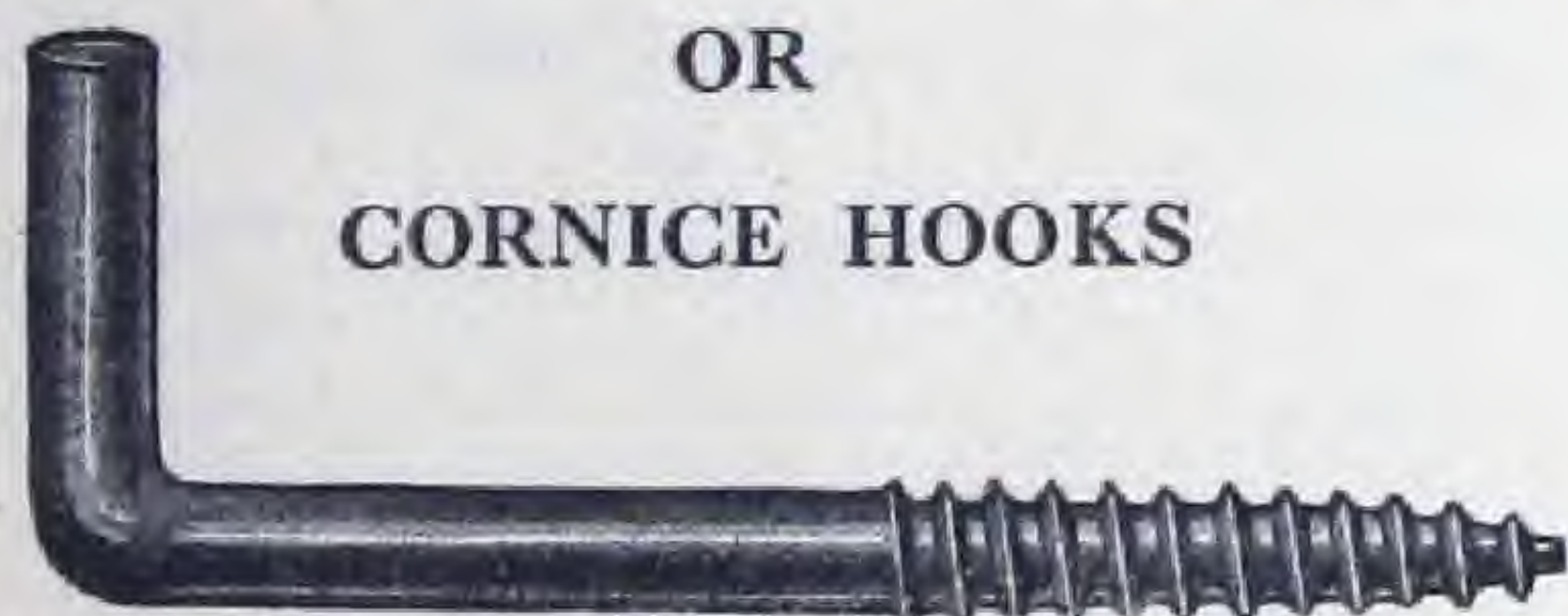
Screw Gauge No.	A Length, Inches	List Price per Gross
5	1 $\frac{3}{4}$	\$.70
6	2	.85
7	2 $\frac{1}{2}$	1.05
8	3	1.30

Packed one gross in a box.

SQUARE CORNERED SCREW HOOKS

OR

CORNICE HOOKS



List Prices per Gross

Screw Gauge No.	Length overall, Inches	Steel Wire List	Brass Wire List
4	1 $\frac{1}{4}$	\$.70	<i>Prices on Application.</i>
5	1 $\frac{1}{2}$	.75
6	1 $\frac{3}{4}$	.85
7	2	1.00	
8	2 $\frac{1}{4}$	1.10	
9	2 $\frac{1}{2}$	1.50	
10	2 $\frac{3}{4}$	2.00	
10	3	2.25	

Packed one gross in a box.

STORM WINDOW EYES

with No. 5 Burrs



Screw Gauge No.	A Length, Inches	List Price Per Gross
12	2	\$2.30
12	2 $\frac{1}{4}$	2.65
12	2 $\frac{1}{2}$	2.85

Always furnished electro-galvanized unless otherwise specified.

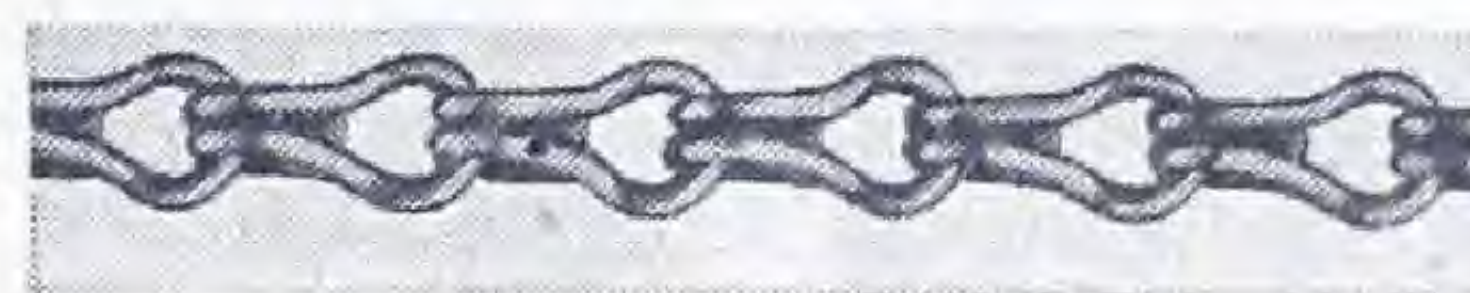
Packed half gross in a box.

JACK CHAIN

Bright Steel Coppered Brass Electro Galvanized



Single Link



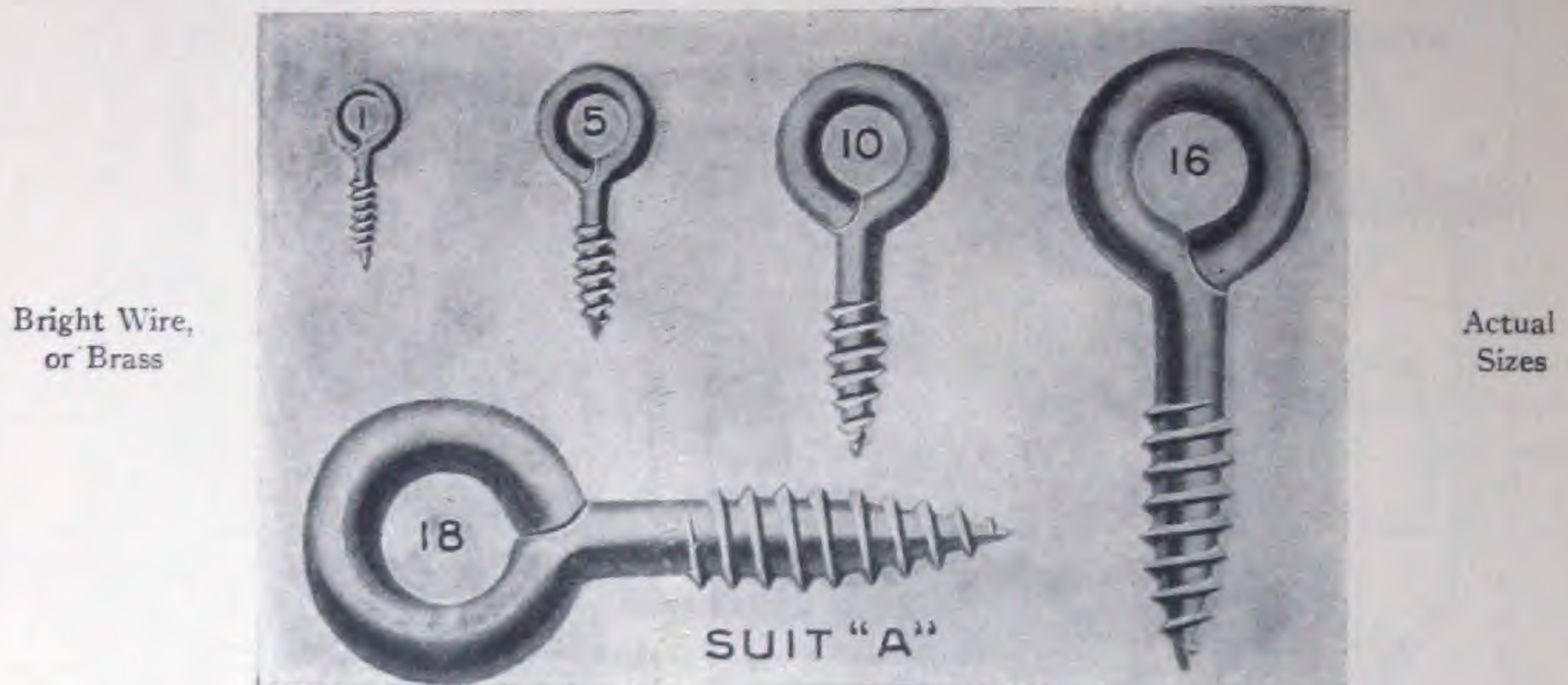
Double Link

*Packed in Cartons containing one dozen yards.
List Price per Dozen Yards*

S.W.G. Gauge	Steel		Brass		Coppered or Electro Galvanized
	Single	Double	Single	Double	
7	\$1.10	\$1.40	\$6.35	\$7.50	<i>Prices on Application.</i>
8	.95	1.15	5.25	6.15	
9	.90	1.05	4.25	5.15	
10	.80	.95	3.50	4.75	
11	.70	.85	2.80	3.77	
12	.65	.72	2.30	3.20	
13	.60	.65	1.92	2.50	
14	.55	.60	1.60	2.05	
15	.50	.58	1.25	1.60	
16	.48	.53	1.00	1.32	
17	.45	.51	.84	1.10	
18	.40	.48	.70	.90	
19	.40	.45	.60	.76	
20	.40	.45	.55	.72	

Can also be supplied on reels containing 500 to 1000 feet determined by gauge specified. Prices on application.

BRIGHT GOODS—Cont'd



SCREW EYES

Suit "A"

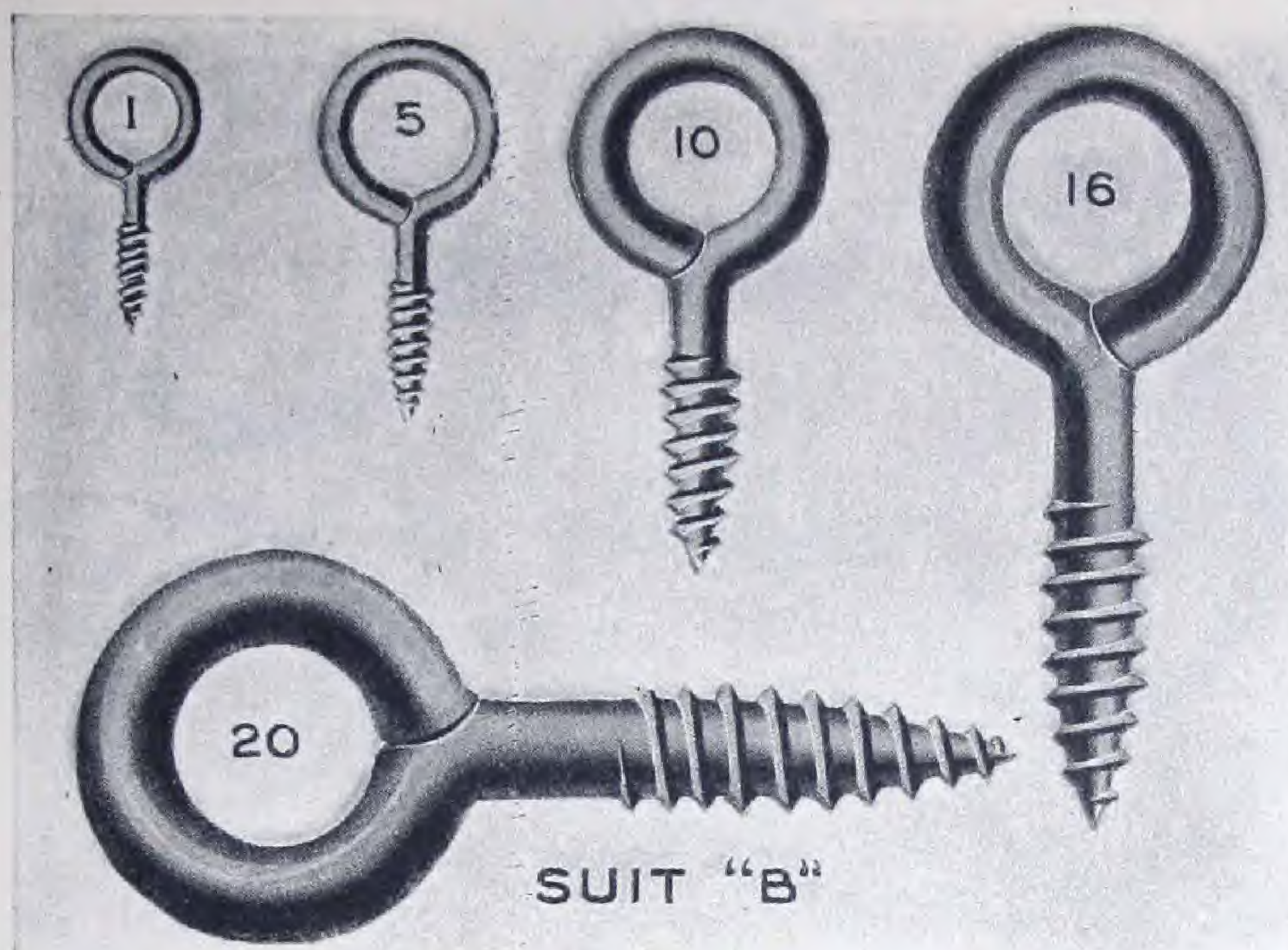
List Price per Gross and Approximate Dimensions.

Screw Gauge No.	Diameter of Wire	Inside Diameter of Eye	Length Overall	Length of Shank	List Price of Bright Wire	List Price of Brass Wire
0	.053	$\frac{3}{32}$	$\frac{7}{16}$	$\frac{1}{4}$	\$.40	
1 special	.073	$\frac{1}{8}$	$\frac{9}{16}$	$\frac{9}{32}$	.40	
1	.073	$\frac{1}{8}$	$\frac{5}{8}$	$\frac{3}{8}$	.40	\$ 1.25
2	.084	$\frac{9}{64}$	$\frac{3}{4}$	$1\frac{15}{32}$	.40	1.25
3	.095	$\frac{9}{64}$	$1\frac{13}{16}$	$\frac{1}{2}$	.40	1.25
4	.106	$\frac{5}{32}$	$\frac{7}{8}$	$\frac{9}{16}$	.40	1.25
5	.117	$\frac{3}{16}$	1	$\frac{5}{8}$	.45	1.25
6	.128	$\frac{7}{32}$	1	$\frac{5}{8}$	.50	1.60
7	.150	$\frac{1}{4}$	$1\frac{3}{32}$	$\frac{5}{8}$	.55	2.00
8	.161	$\frac{1}{4}$	$1\frac{5}{16}$	$\frac{3}{4}$	.65	2.50
9	.172	$\frac{9}{32}$	$1\frac{7}{16}$	$\frac{7}{8}$	.75	2.75
10	.183	$\frac{9}{32}$	$1\frac{9}{16}$	$1\frac{5}{16}$	.85	3.75
11	.193	$\frac{9}{32}$	$1\frac{11}{16}$	$1\frac{1}{16}$	1.00	5.25
12	.205	$\frac{5}{16}$	$1\frac{3}{4}$	$1\frac{1}{8}$	1.30	6.50
13	.227	$\frac{5}{16}$	$1\frac{13}{16}$	$1\frac{1}{8}$	1.60	7.50
14	.238	$1\frac{1}{32}$	2	$1\frac{1}{8}$	2.00	10.00
15	.249	$1\frac{1}{32}$	2	$1\frac{3}{16}$	2.50	12.50
16	.260	$1\frac{1}{32}$	$2\frac{1}{4}$	$1\frac{3}{8}$	3.00	15.00
18	.293	$\frac{3}{8}$	$2\frac{3}{8}$	$1\frac{1}{2}$	3.60	20.00
20	.315	$1\frac{15}{32}$	$2\frac{5}{8}$	$1\frac{5}{8}$	7.00	

Packed in cartons one gross of a size to a package up to and including No. 14 gauge;
15 gauge to 20 gauge packed half gross to a package.

BRIGHT GOODS—Cont'd

Bright Wire,
or Brass



Actual
Sizes

SCREW EYES

Suit "B"

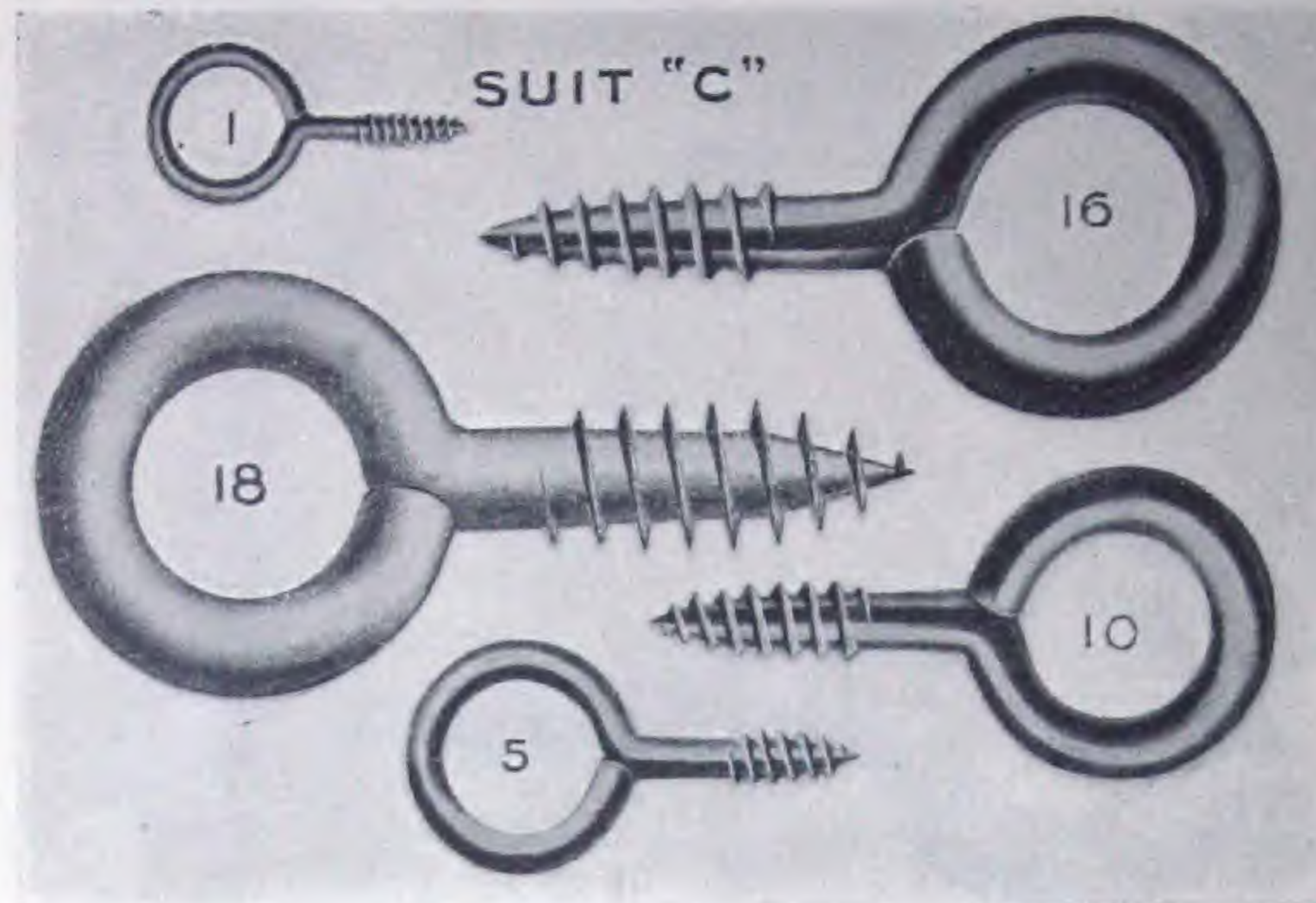
List Price per Gross and Approximate Dimensions.

Screw Gauge No.	Diameter of Wire	Inside Diameter of Eye	Length Overall	Length of Shank	List Price of Bright Wire	List Price of Brass Wire
1	.073	$\frac{7}{32}$	$\frac{13}{16}$	$\frac{1}{2}$	\$.40	\$1.25
2	.084	$\frac{15}{64}$	$\frac{7}{8}$	$\frac{1}{2}$	.40	1.25
3	.095	$\frac{1}{4}$	1	$\frac{9}{16}$	.40	1.25
4	.106	$\frac{9}{32}$	1	$\frac{9}{16}$	.40	1.25
5	.117	$\frac{9}{32}$	$\frac{13}{32}$	$\frac{5}{8}$	.45	1.25
6	.128	$\frac{5}{16}$	$\frac{11}{8}$	$\frac{5}{8}$	.50	1.50
7	.150	$\frac{5}{16}$	$\frac{11}{4}$	$\frac{11}{16}$	.55	2.00
8	.161	$\frac{11}{32}$	$\frac{15}{16}$	$\frac{3}{4}$	.65	2.50
9	.172	$\frac{3}{8}$	$\frac{17}{16}$	$\frac{3}{4}$	.75	2.75
10	.183	$\frac{3}{8}$	$\frac{19}{16}$	$\frac{7}{8}$	.85	3.75
11	.193	$\frac{13}{32}$	$\frac{13}{4}$	1	1.00	5.25
12	.205	$\frac{15}{32}$	$\frac{17}{8}$	$\frac{11}{8}$	1.30	6.50
13	.227	$\frac{15}{32}$	2	$\frac{11}{8}$	1.60	7.50
14	.238	$\frac{1}{2}$	$\frac{21}{8}$	$\frac{13}{16}$	2.00	10.00
15	.249	$\frac{17}{32}$	$\frac{23}{16}$	$\frac{11}{4}$	2.50	12.50
16	.260	$\frac{17}{32}$	$\frac{23}{8}$	$\frac{13}{8}$	3.00	16.00
18	.293	$\frac{9}{16}$	$\frac{25}{8}$	$\frac{11}{2}$	3.60	18.00
20	.315	$\frac{5}{8}$	$\frac{27}{8}$	$\frac{15}{8}$	7.00	

Packed in cartons one gross of a size to a package up to and including No. 14 gauge;
15 gauge to 20 gauge packed half gross to a package.

BRIGHT GOODS—Cont'd

Bright Wire,
or Brass



Actual
Sizes

SCREW EYES

Suit "C"

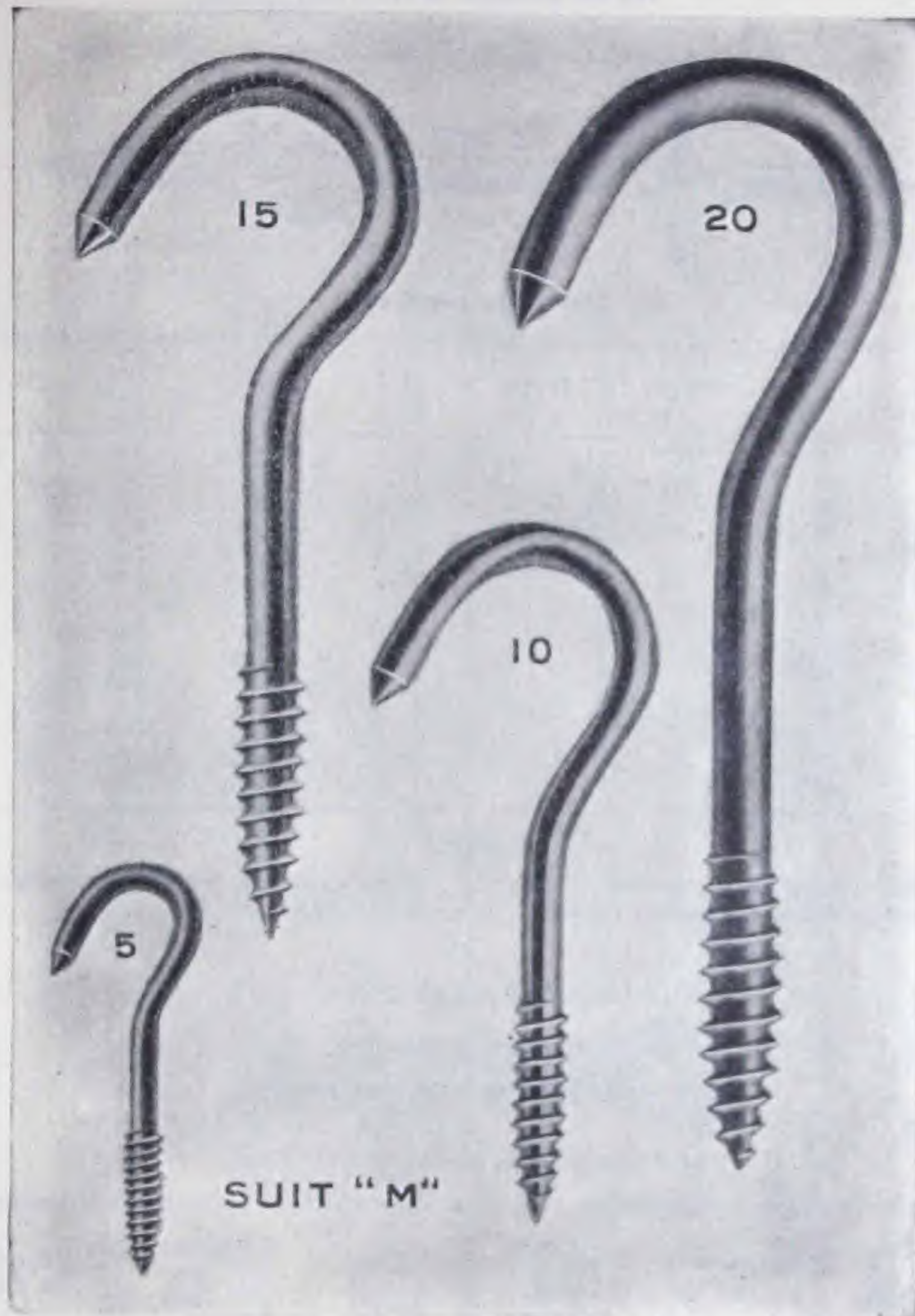
List Price per Gross and Approximate Dimensions

Screw Gauge No.	Diameter of Wire	Inside Diameter of Eye	Length Overall	Length of Shank	List Price of Bright Wire	List Price of Brass Wire
1	.073	$2\frac{1}{64}$	1	$\frac{1}{2}$	\$.40	\$ 1.25
2	.084	$2\frac{1}{64}$	1	$\frac{9}{16}$	.40	1.25
3	.095	$1\frac{1}{32}$	$1\frac{1}{8}$	$\frac{5}{8}$	.40	1.25
4	.106	$1\frac{3}{32}$	$1\frac{3}{16}$	$\frac{5}{8}$	.40	1.25
5	.117	$\frac{3}{8}$	$1\frac{5}{16}$	$\frac{5}{8}$	.45	1.25
6	.128	$\frac{7}{16}$	$1\frac{5}{16}$	$\frac{5}{8}$	.50	1.50
7	.150	$1\frac{5}{32}$	$1\frac{3}{8}$	$2\frac{1}{32}$	.55	2.00
8	.161	$\frac{1}{2}$	$1\frac{9}{16}$	$\frac{3}{4}$	.65	2.50
9	.172	$1\frac{7}{32}$	$1\frac{9}{16}$	$\frac{3}{4}$	.75	2.75
10	.183	$1\frac{7}{32}$	$1\frac{3}{4}$	$1\frac{5}{16}$	.85	3.75
11	.193	$\frac{9}{16}$	$1\frac{7}{8}$	1	1.00	5.25
12	.205	$\frac{5}{8}$	$1\frac{15}{16}$	1	1.30	6.50
13	.227	$\frac{5}{8}$	$2\frac{1}{8}$	$1\frac{1}{16}$	1.60	7.50
14	.238	$\frac{5}{8}$	$2\frac{3}{16}$	$1\frac{3}{16}$	2.00	10.00
15	.249	$2\frac{1}{32}$	$2\frac{5}{16}$	$1\frac{3}{16}$	2.50	12.50
16	.260	$2\frac{1}{32}$	$2\frac{1}{2}$	$1\frac{1}{4}$	3.00	15.00
18	.293	$1\frac{1}{16}$	$2\frac{3}{4}$	$1\frac{9}{16}$	3.60	20.00
20	.315	$1\frac{3}{16}$	3	$1\frac{5}{8}$	7.00	

Packed in cartons one gross of a size to a package up to and including No. 14 gauge;
15 gauge to 20 gauge packed half gross to a package.

BRIGHT GOODS—Cont'd

SCREW HOOKS



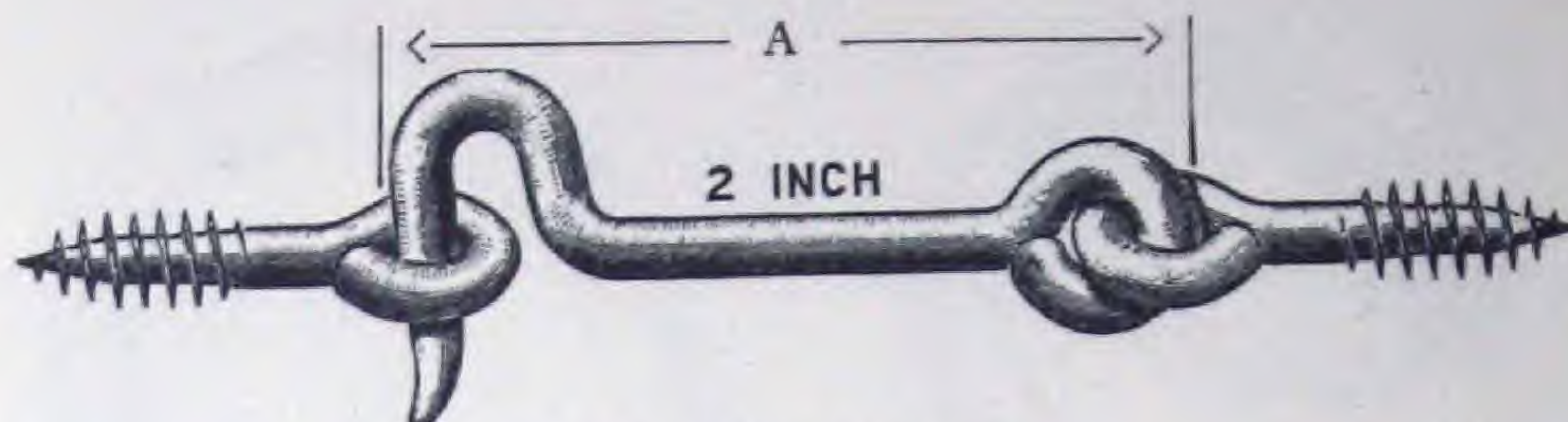
List Price per Gross

Screw Gauge No.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	20
Length over-all in inches	1 $\frac{3}{8}$	1 $\frac{1}{2}$	1 $\frac{5}{8}$	1 $\frac{3}{4}$	1 $\frac{7}{8}$	2	2 $\frac{1}{4}$	2 $\frac{1}{2}$	2 $\frac{3}{4}$	3	3 $\frac{1}{4}$	3 $\frac{1}{2}$	3 $\frac{3}{4}$	4	4 $\frac{1}{4}$	4 $\frac{1}{2}$	4 $\frac{3}{4}$
Bright Wire.	\$.50	.60	.70	.70	.75	.85	1.00	1.10	1.25	1.50	1.50	2.00	2.25	2.75	3.50	4.00	4.75
Brass Wire.	\$1.00		1.50		2.25		3.50		6.25								

Packed in cartons one gross of a size to a package up to and including No. 12 gauge;
13 gauge to 20 gauge packed half gross to a package.

BRIGHT GOODS—Cont'd

GATE HOOKS AND EYES



List Price per Gross

S.W.G. No.	Length "A" Inches	Steel	Brass
6	1½	\$ 1.75	\$ 6.50
7	2	2.00	7.50
8	2½	2.50	10.00
9	3	3.00	12.50
10	3½	3.50	15.00
11	4	4.00	17.50
13	5	6.00	22.50
13	6	7.50	27.50
13	8	9.00	....
13	10	10.00	....
13	12	12.50	....
13	14	15.00	....
13	16	17.50	....

Packing

2½ inches and shorter, one gross in a box.
3 to 6 inches, one-half gross in a package.

8 inches and longer, one-quarter gross in a package.

FLAT COTTER PINS



All Measurements made under the Eye

Size	Price per 1000	Quantity in Pkg.	Approx. Wt. per 1000 Count	Size	Price per 1000	Quantity in Pkg.	Approx. Wt. per 1000 Count
$\frac{3}{8}$ x $\left\{ \begin{array}{l} 1\frac{1}{2} \\ 1\frac{3}{4} \\ 2 \\ 2\frac{1}{4} \\ 2\frac{1}{2} \\ 2\frac{3}{4} \\ 3 \end{array} \right.$	\$6.10	Bulk	21	$\frac{5}{8}$ x $\left\{ \begin{array}{l} 1\frac{3}{4} \\ 2 \\ 2\frac{1}{4} \\ 2\frac{1}{2} \\ 2\frac{3}{4} \\ 3 \\ 3\frac{1}{4} \\ 3\frac{1}{2} \end{array} \right.$	\$11.10	Bulk	43
	7.10	"	25		"	45	
	8.10	"	29		"	50	
	9.10	"	31		"	55	
	10.10	"	33		"	59	
	11.10	"	36		"	62	
	12.10	"	39		"	66	
$\frac{1}{2}$ x $\left\{ \begin{array}{l} 1\frac{1}{2} \\ 1\frac{3}{4} \\ 2 \\ 2\frac{1}{4} \\ 2\frac{1}{2} \\ 2\frac{3}{4} \\ 3 \end{array} \right.$	9.00	Bulk	38	$\frac{3}{4}$ x $\left\{ \begin{array}{l} 2 \\ 2\frac{1}{4} \\ 2\frac{1}{2} \\ 2\frac{3}{4} \\ 3 \\ 3\frac{1}{4} \\ 3\frac{1}{2} \end{array} \right.$	14.50	Bulk	50
	10.00	"	41		"	56	
	11.00	"	44		"	63	
	12.00	"	47		"	66	
	13.00	"	50		"	69	
	14.00	"	52		"	73	
	15.00	"	55		"	77	

Prices for lengths longer than listed furnished upon request.



BRIGHT GOODS—Cont'd

ROUND COTTER PINS



All Measurements made under the Eye

Wire Gauge Size	Size	Price per 1000	Quantity in Package	Approx. Wgt. per 1000 count	Wire Gauge Size	Size	Price per 1000	Quantity in Package	Approx. Wgt. per 1000 count
No. 16	$\frac{1}{16}$ x	$\frac{1}{2}$	1000	.81	No. 4	$\frac{1}{4}$ x	1	500	17.81
		$\frac{3}{4}$	1000	.94			$1\frac{1}{4}$	500	20.5
		1	1000	1.13			$1\frac{1}{2}$	250	23.
		$1\frac{1}{4}$	1000	1.31			$1\frac{3}{4}$	250	26.50
		$1\frac{1}{2}$	1000	1.56			2	250	29.
		$1\frac{3}{4}$	1000	2.			$2\frac{1}{4}$	250	32.50
No. 13	$\frac{3}{32}$ x	2	1000	2.31	No. 1	$\frac{5}{16}$ x	$2\frac{1}{2}$	250	35.00
		$\frac{1}{2}$	1000	1.44			3	250	40.13
		$\frac{3}{4}$	1000	2.			$3\frac{1}{2}$	250	46.
		1	1000	2.31			4	250	51.81
		$1\frac{1}{4}$	1000	2.75			1	250	29.5
		$1\frac{1}{2}$	1000	3.56			$1\frac{1}{4}$	250	34.06
No. 11	$\frac{1}{8}$ x	$1\frac{3}{4}$	1000	4.06	No. 1	$\frac{5}{16}$ x	$1\frac{1}{2}$	250	38.
		2	1000	4.63			$1\frac{3}{4}$	250	44.
		$2\frac{1}{2}$	1000	5.43			2	250	47.81
		$\frac{1}{2}$	1000	2.75			$2\frac{1}{4}$	250	52.38
		$\frac{3}{4}$	1000	3.63			$2\frac{1}{2}$	250	57.63
		1	1000	4.			3	Bulk	67.
No. 9	$\frac{5}{32}$ x	$1\frac{1}{4}$	1000	4.88	No. 1	$\frac{5}{16}$ x	$3\frac{1}{2}$	"	75.31
		$1\frac{1}{2}$	1000	5.56			4	"	84.44
		$1\frac{3}{4}$	500	6.			5	"	100.
		2	500	7.19			$1\frac{1}{2}$	"	60.
		$2\frac{1}{2}$	500	9.75			2	"	70.
		3	500	10.5			$2\frac{1}{2}$	"	84.
No. 7	$\frac{3}{16}$ x	3	500	10.5	No. 1	$\frac{5}{16}$ x	3	"	95.
		$\frac{3}{4}$	1000	5.63			$3\frac{1}{2}$	"	109.
		1	1000	7.			4	"	123.
		$1\frac{1}{4}$	500	8.31			5	"	151.
		$1\frac{1}{2}$	500	9.31			6	"	179.
		$1\frac{3}{4}$	500	9.81			2	"	145.
No. 7	$\frac{3}{16}$ x	2	500	10.88	No. 1	$\frac{5}{16}$ x	$2\frac{1}{2}$	"	170.
		$2\frac{1}{4}$	500	13.5			3	"	195.
		$2\frac{1}{2}$	500	14.			$3\frac{1}{2}$	"	220.
		3	250	16.50			4	"	245.
		$\frac{3}{4}$	1000	8.			5	"	295.
		1	1000	9.31			6	"	340.
No. 7	$\frac{3}{16}$ x	$1\frac{1}{4}$	500	10.63	No. 1	$\frac{5}{16}$ x	3	"	325.
		$1\frac{1}{2}$	500	13.50			$3\frac{1}{2}$	"	365.
		$1\frac{3}{4}$	500	14.25			4	"	405.
		2	500	16.5			5	"	480.
		$2\frac{1}{4}$	500	17.63			6	"	555.
		$2\frac{1}{2}$	500	20.			3	"	480.
No. 7	$\frac{3}{16}$ x	3	250	22.88	No. 1	$\frac{5}{16}$ x	4	"	590.
		$3\frac{1}{2}$	250	29.			5	"	700.
		4	250	32.			6	"	810.
		$\frac{3}{4}$	1000	8.			3	"	480.
		1	1000	9.31			4	"	590.
		$1\frac{1}{4}$	500	10.63			5	"	700.

$\frac{5}{64}$ ", $\frac{7}{64}$ ", $\frac{9}{64}$ ", $\frac{11}{64}$ ", $\frac{13}{64}$ ", $\frac{7}{32}$ " and $\frac{7}{16}$ " diameters are not listed above but are furnished to the extent that they may be in stock, or when required in sufficient quantities of a size to warrant being made up. These sizes will take the list of the next larger diameter.

Intermediate lengths take next longer list. Sizes longer than shown on list—add one and one half times last differential for each unit of length or fraction thereof.

Prices apply to standard packages only. Extra charge for other than standard packing.

ROUND BRASS COTTER PINS are furnished to the extent that they may be in stock or when required in sufficient quantities of a size to warrant being made up. Prices on application.

BRIGHT GOODS—Cont'd

COTTER PINS Automobile Assortments



No. 5 Assortment

Total	No. of each	Size
100	10	$\frac{1}{16}$ x $\frac{1}{2}$
	25	x $1\frac{1}{4}$
	10	$\frac{3}{32}$ x $\frac{1}{2}$
	10	x $\frac{3}{4}$
	15	x 1
	10	x $1\frac{1}{4}$
	15	$\frac{1}{8}$ x $\frac{3}{4}$
	5	x 1



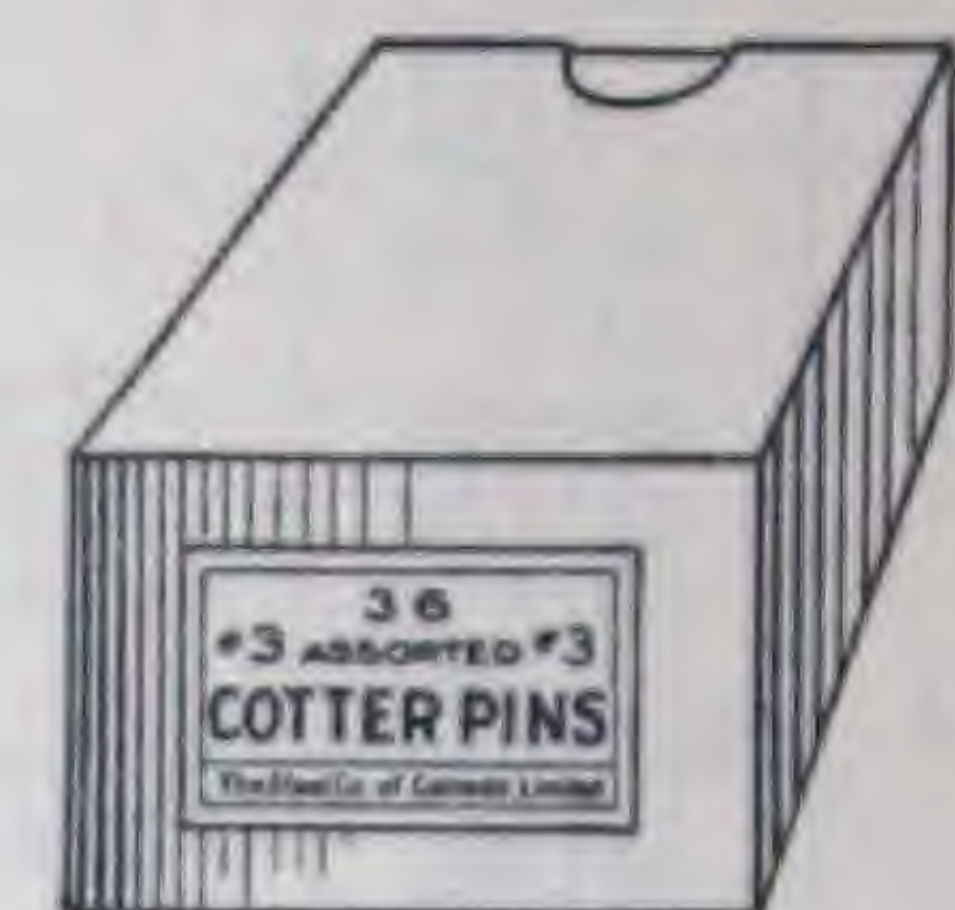
No. 7 Assortment

Total	No. of each	Size
100	10	$\frac{1}{16}$ x $\frac{1}{2}$
	10	$\frac{3}{32}$ x $\frac{1}{2}$
	30	x $\frac{3}{4}$
	20	x 1
	5	$\frac{1}{8}$ x $\frac{3}{4}$
	15	x 1
	5	x $1\frac{1}{4}$
	5	$\frac{5}{32}$ x 1

A very handy and useful article for the motorists' tool box. Assortment No. 7 is made up of sizes particularly adapted to "Ford" cars while No. 5 assortment consists of the sizes generally called for in cars of other makes.

Packed in neat tin boxes
Prices on application

COTTER PINS Special Assortments



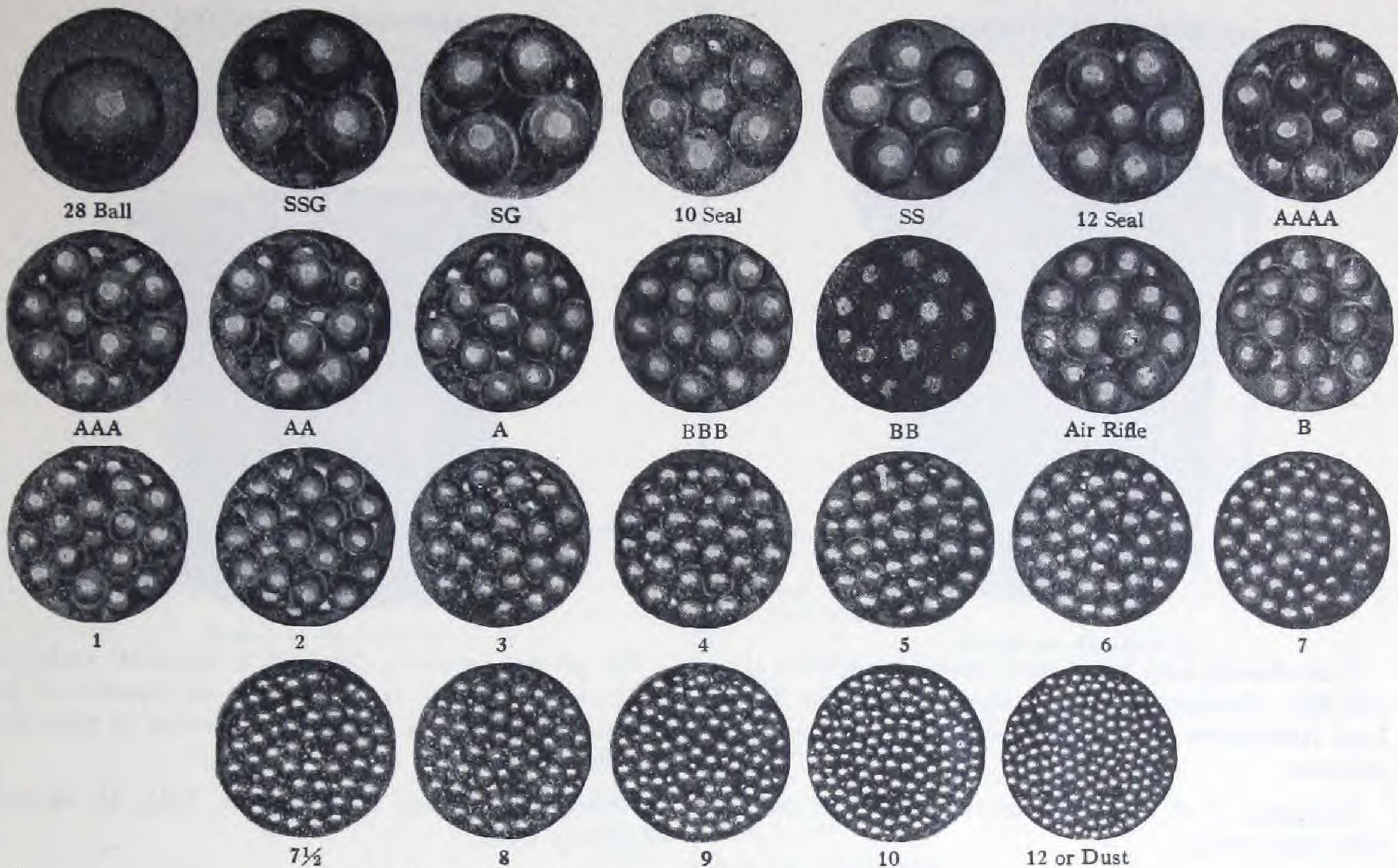
Size	Assortment Nos.							
	1	2	3	4	5	6	7	8
	Quantity of each size in package							
$\frac{1}{16}$ x $\frac{1}{2}$					10		10	
x 1			3					
x $1\frac{1}{4}$					25	15		
$\frac{3}{32}$ x $\frac{1}{2}$					10	15	10	
x $\frac{3}{4}$	20	10			10		30	10
x 1			3	10	15		20	10
x $1\frac{1}{4}$			3		10			
x $1\frac{1}{2}$						15		
$\frac{1}{8}$ x $\frac{1}{2}$						5		
x $\frac{3}{4}$					15		5	
x 1	20	10	3		5	5	15	10
x $1\frac{1}{4}$			3			20	5	10
x $1\frac{1}{2}$			3					
x 2						5		
$\frac{5}{32}$ x 1						15	5	
x $1\frac{1}{2}$			3					
$\frac{3}{16}$ x 1				10		5		
x $1\frac{1}{4}$	20	10	6					10
x $1\frac{1}{2}$	10	5	3	10				10
x 2			3					
$\frac{1}{4}$ x $1\frac{1}{4}$				5				
x $1\frac{1}{2}$				10				
x $1\frac{3}{4}$	10	5						10
x 2	10	5	3					10
$\frac{5}{16}$ x 2	10	5		5				10
x $2\frac{1}{2}$								10
Total No. in each package	100	50	36	50	100	100	100	100

Packed in neat cardboard cartons
Prices on application



LEAD GOODS—Cont'd

STANDARD AND CHILLED SHOT



STANDARD SHOT AND DOUBLE CHILLED SHOT

Made in the following eighteen sizes:—

AA	B	5	9
A	1	6	10
BBB	2	7	12 or Dust
BB	3	7 1/2	
Air Rifle	4	8	

Prices on Application.

STANDARD MOULDED SHOT

Made in the following eight sizes:—

28 Ball	S.G.	S.S.	AAAA
S.S.G.	10 Seal	12 Seal	AAA

Prices on Application.

PACKAGING

All shot is put up in bags containing 5, 10 or 25 pounds.



SIZES OF SHOT

No.	Diam. Inches	Standard Pellets per ounce	Chilled Pellets per ounce	No.	Diam. Inches	Standard Pellets per ounce
Dust	.046	1963		B	.17	59
10	.07	848	868	Air Rifle	.175	55
9	.08	568	585	BB	.18	50
8	.09	399	409	BBB	.19	42
7 1/2	.095	338	360	A	.20	36
7	.10	291	299	AA	.21	31
6	.11	218	223	AAA	.22	27
5	.12	168	172	AAAA or 12 Seal	.25	24
4	.13	132	136	SS or 10 Seal	.28	15
3	.14	106	109	SG	.30	11
2	.15	86	88	SSG	.32	9
1	.16	71	73			

LEAD GOODS—Cont'd

TIGER PURE WHITE LEAD IN OIL



A chemically pure white lead ground in Refined Linseed Oil. Packages bear the yellow label of the White Lead Association of Canada, guaranteeing purity of the contents.

Packages: 1, 2 and 5 pound tins; 12½, 25, 50 and 100 pound irons.

DECORATOR'S PURE WHITE LEAD IN OIL



A chemically pure white lead ground in Refined Linseed Oil. Quality guaranteed by the yellow label of the White Lead Association of Canada.

Packages: 1, 2 and 5 pound tins; 12½, 25, 50 and 100 pound irons.

DECORATOR'S SPECIAL WHITE LEAD IN OIL



The process to which this lead is subjected makes it particularly adapted for indoor use on account of its brilliant and enduring whiteness. Ground in pure linseed oil.

Packages: 1, 2 and 5 pound tins; 12½, 25, 50 and 100 pound irons.

MAPLE LEAF SPECIAL WHITE LEAD IN OIL



White lead ground in Refined Linseed Oil and put up in a large variety of small packages.

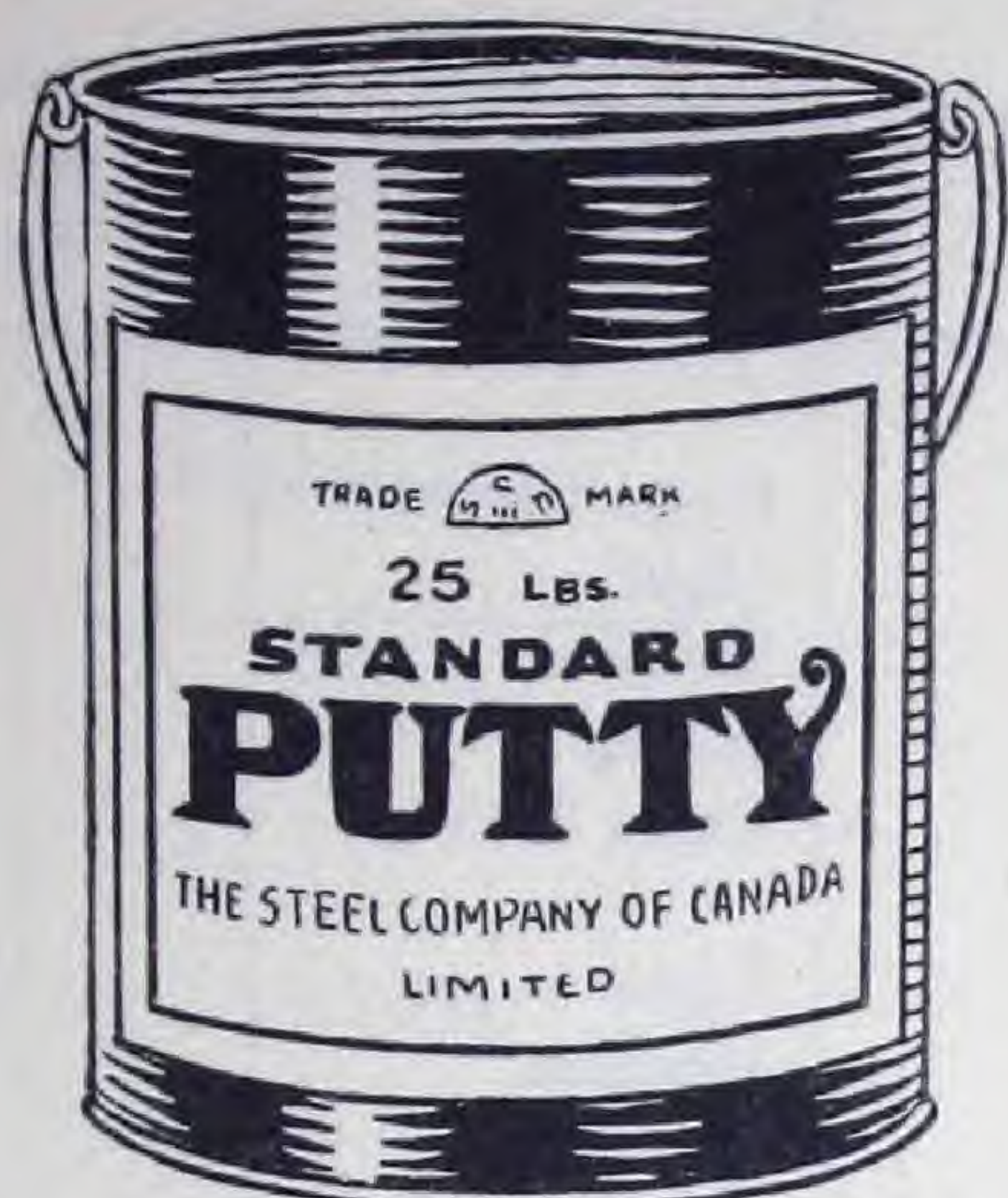
Packages: 1, 2, and 5 pound tins; 12½, 25, 50 and 100 pound irons.

Prices on Application.



LEAD GOODS—Cont'd

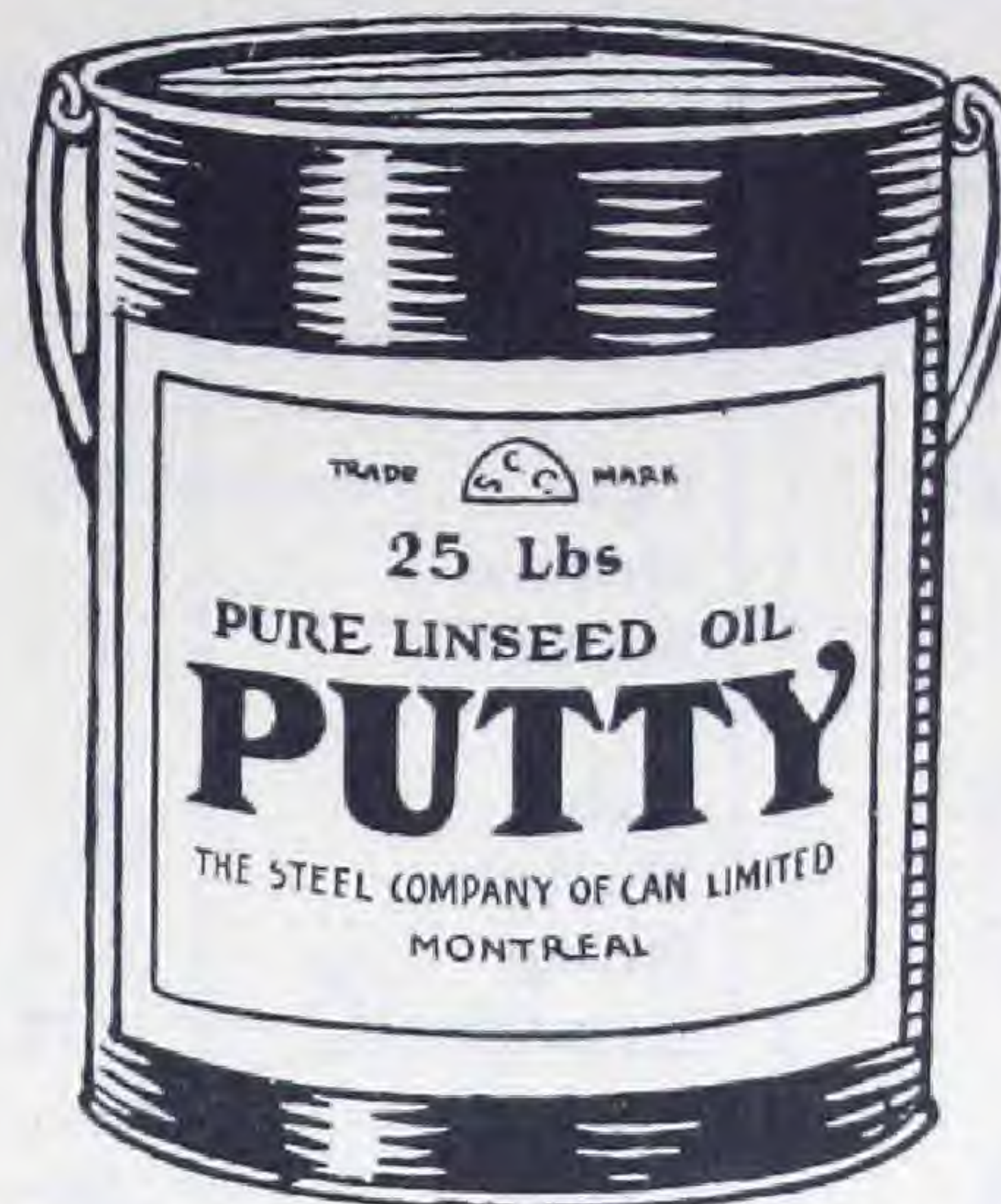
STANDARD PUTTY



An excellent grade of Putty for general glazing purposes. Packages bear the guarantee label of the Canadian Putty Association.

Prices on application.

PURE LINSEED OIL PUTTY



A guaranteed Pure Putty, ground in Pure Linseed Oil and suitable for the most exacting work. Packages bear the guarantee label of the Canadian Putty Association.

Prices on application.

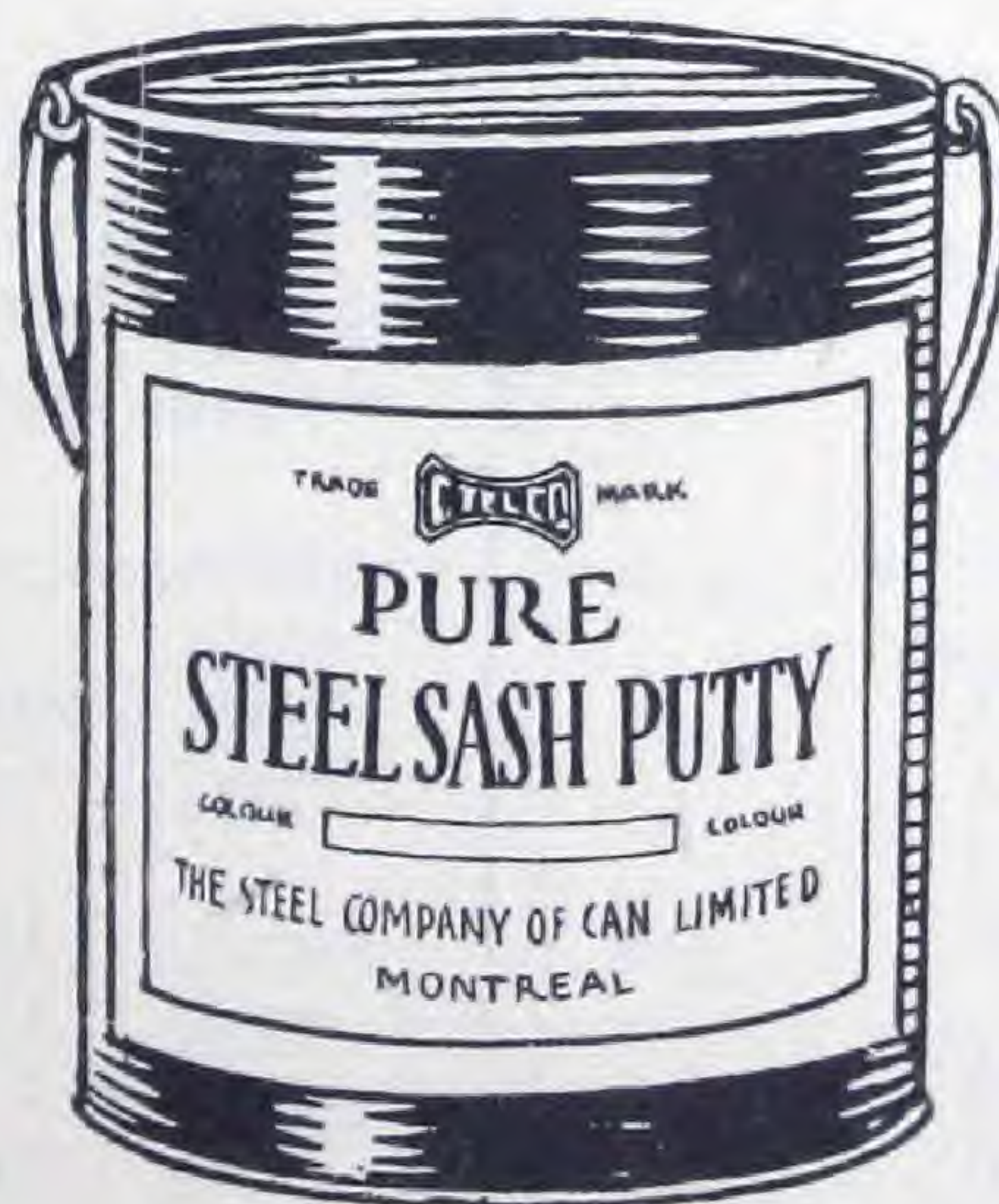
Packaged

Bulk in 400 pound steel drums.

"	100	"	"	"
"	25	"	irons or tins loose.	
"	25	"	tins boxed	
"	12½	"	irons or tins boxed.	

Also put up in 1, 1½, 2 and 5 pound tins.

STEEL SASH PUTTY



A specially prepared Putty for Glazing Steel Sash.
Supplied Natural or any Color.

Prices on application.

Packaged

Bulk in 400 pound steel drums.

"	100	"	"	"
"	25	"	irons.	

Our facilities permit our manufacturing putty to any special specification.



LEAD GOODS—Cont'd

LEAD WATER PIPE

Inside Diameter Inches	Description	Weight per yard Pounds
$\frac{3}{8}$	Light	$2\frac{3}{4}$
	Medium	3
	Strong	4, 5
$\frac{1}{2}$	Light	4
	Medium	$4\frac{1}{2}$
	Strong	5, 6
	Extra Strong	7, 8, 9
$\frac{5}{8}$	Light	5
	Medium	6
	Strong	7
	Extra Strong	8, 9
$\frac{3}{4}$	Light	6
	Medium	7
	Strong	8
	Extra Strong	9, 10
1	Light	6
	Medium	7
	Strong	8
	Extra Strong	9, 10, 11, 12, 13, 14, 15, 16
$1\frac{1}{4}$	Light	8
	Medium	10
	Strong	12
	Extra Strong	14
$1\frac{1}{2}$	Light	11
	Medium	12
	Strong	14
	Extra Strong	16, 18
$1\frac{3}{4}$	Light	14
	Medium	16
	Strong	18
	Extra Strong	20
2	Light	18
	Medium	20
	Strong	22
	Extra Strong	24, 27, 29, 32, 35

Put up in coils weighing approximately 200 pounds each.
Price on application.

When order does not mention weight of pipe per yard, medium weight will be shipped.

The weights of lead products shown in this catalogue are based on pig lead weighing 709.5 pounds per cubic foot.

LEAD WASTE PIPE

Inside Diameter Inches	Description	Weight per yard Pounds
$1\frac{1}{4}$	Extra Light	$3\frac{1}{2}$
	Light	$4\frac{1}{2}$
	Medium	6
	Strong	7
	Extra Strong	8
$1\frac{1}{2}$	Light	$5\frac{1}{2}$
	Medium	7
	Strong	8
	Extra Strong	9
2	Light	6
	Medium	8
	Strong	$10\frac{1}{2}$
	Extra Strong	12
$2\frac{1}{2}$	Light	$8\frac{1}{2}$
	Medium	13
	Strong	16
	Extra Strong	23
3	Light	10
	Medium	16
	Strong	21
4	Medium	18
	Strong	24

Furnished in standard lengths of 8 feet, but when specified, 6 foot lengths can be supplied.

Prices on application.

Packed in Boxes

Inside Diameter, Inches	Lengths in a Box
$1\frac{1}{4}$	25
$1\frac{1}{2}$	25
2	16
$2\frac{1}{2}$	9
3	6
4	3

ANTIMONIAL LEAD PIPE

Antimonial Lead Pipe can be furnished within the range of sizes listed above to the extent of being in stock or when ordered in quantities of one ton or more of a size.

Prices on application.

DECIMAL EQUIVALENTS

Exact Decimal Equivalents of the Fractions of an Inch

Fractions				Decimals	Fractions				Decimals
$\frac{1}{64}$	.....	.....	.....	.015625	$\frac{33}{64}$	.....	.....	.....	.515625
.....	$\frac{1}{32}$	.....	.....	.03125	.....	$\frac{17}{32}$	.....	.....	.53125
$\frac{3}{64}$	.....	.....	.....	.046875	$\frac{35}{64}$	.....	.....	.....	.546875
.....	.....	$\frac{1}{16}$	.....	.0625	.....	.....	$\frac{9}{16}$	.....	.5625
$\frac{5}{64}$	.....	.....	.....	.078125	$\frac{37}{64}$	.....	.....	.....	.578125
.....	$\frac{3}{32}$	.....	.....	.09375	.....	$\frac{19}{32}$	.....	.....	.59375
$\frac{7}{64}$	.....	.....	.....	.109375	$\frac{39}{64}$	.....	.....	.....	.609375
.....	.....	.....	$\frac{1}{8}$	.125	.....	.....	.....	$\frac{5}{8}$	.625
$\frac{9}{64}$	.....	.....	.....	.140625	$\frac{41}{64}$	.....	.....	.....	.640625
.....	$\frac{5}{32}$	.....	.....	.15625	.....	$\frac{21}{32}$	.....	.....	.65625
$\frac{11}{64}$	.....	.....	.....	.171875	$\frac{43}{64}$	.....	.....	.....	.671875
.....	.....	$\frac{3}{16}$	.....	.1875	.....	.....	$\frac{11}{16}$	.....	.6875
$\frac{13}{64}$	.....	.....	.....	.203125	$\frac{45}{64}$	.....	.....	.....	.703125
.....	$\frac{7}{32}$	.....	.....	.21875	.....	$\frac{23}{32}$	.....	.....	.71875
$\frac{15}{64}$	.....	.....	.....	.234375	$\frac{47}{64}$	.....	.....	.....	.734375
.....	.....	.....	$\frac{1}{4}$	.25	.....	.....	.....	$\frac{3}{4}$	.75
$\frac{17}{64}$	.....	.....	.....	.265625	$\frac{49}{64}$	.....	.....	.....	.765625
.....	$\frac{9}{32}$	.....	.....	.28125	.....	$\frac{25}{32}$	.....	.....	.78125
$\frac{19}{64}$	.....	.....	.....	.296875	$\frac{51}{64}$	.....	.....	.....	.796875
.....	.....	$\frac{5}{16}$	.....	.3125	.....	.....	$\frac{13}{16}$	.....	.8125
$\frac{21}{64}$	.....	.....	.....	.328125	$\frac{53}{64}$	.....	.....	.....	.828125
.....	$\frac{11}{32}$	.....	.....	.34375	.....	$\frac{27}{32}$	.....	.....	.84375
$\frac{23}{64}$	.....	.....	.....	.359375	$\frac{55}{64}$	.....	.....	.....	.859375
.....	.....	.....	$\frac{3}{8}$	.375	.....	.....	.....	$\frac{7}{8}$	.875
$\frac{25}{64}$	.....	.....	.....	.390625	$\frac{57}{64}$	.....	.....	.....	.890625
.....	$\frac{13}{32}$	.....	.....	.40625	.....	$\frac{29}{32}$	.....	.....	.90625
$\frac{27}{64}$	.....	.....	.....	.421875	$\frac{59}{64}$	.....	.....	.....	.921875
.....	.....	$\frac{7}{16}$	.....	.4375	.....	.....	$\frac{15}{16}$	.....	.9375
$\frac{29}{64}$	.....	.....	.....	.453125	$\frac{61}{64}$	.....	.....	.....	.953125
.....	$\frac{15}{32}$	.....	.....	.46875	.....	$\frac{31}{32}$	.....	.....	.96875
$\frac{31}{64}$	.....	.....	.....	.484375	$\frac{63}{64}$	.....	.....	.....	.984375
.....	.....	.....	$\frac{1}{2}$	.5	.....	.....	.....	1	1.00

MILLIMETER EQUIVALENTS OF INCHES

Inch	0 Inch	$\frac{1}{16}$ Inch	$\frac{1}{8}$ Inch	$\frac{3}{16}$ Inch	$\frac{1}{4}$ Inch	$\frac{5}{16}$ Inch	$\frac{3}{8}$ Inch	$\frac{7}{16}$ Inch	$\frac{1}{2}$ Inch	$\frac{9}{16}$ Inch	$\frac{5}{8}$ Inch	$1\frac{1}{16}$ Inch	$\frac{3}{4}$ Inch
0	0.0	1.6	3.2	4.8	6.4	7.9	9.5	11.1	12.7	14.3	15.9	17.5	19.1
1	25.4	27.0	28.6	30.2	31.7	33.3	34.9	36.5	38.1	39.7	41.3	42.9	44.4
2	50.8	52.4	54.0	55.6	57.1	58.7	60.3	61.9	63.5	65.1	66.7	68.3	69.8
3	76.2	77.8	79.4	81.0	82.5	84.1	85.7	87.3	88.9	90.5	92.1	93.7	95.2
4	101.6	103.2	104.8	106.4	108.0	109.5	111.1	112.7	114.3	115.9	117.5	119.1	120.7
5	127.0	128.6	130.2	131.8	133.4	134.9	136.5	138.1	139.7	141.3	142.9	144.5	146.1
6	152.4	154.0	155.6	157.2	158.8	160.3	161.9	163.5	165.1	166.7	168.3	169.9	171.5
7	177.8	179.4	181.0	182.6	184.2	185.7	187.3	188.9	190.5	192.1	193.7	195.3	196.9
8	203.2	204.8	206.4	208.0	209.6	211.1	212.7	214.3	215.9	217.5	219.1	220.7	222.3
9	228.6	230.2	231.8	233.4	235.0	236.5	238.1	239.7	241.3	242.9	244.5	246.1	247.7
10	254.0	255.6	257.2	258.8	260.4	261.9	263.5	265.1	266.7	268.3	269.9	271.5	273.1
11	279.4	281.0	282.6	284.2	285.7	287.3	288.9	290.5	292.1	293.7	295.3	296.9	298.4
12	304.8	306.4	308.0	309.6	311.1	312.7	314.3	315.9	317.5	319.1	320.7	322.3	323.8
13	330.2	331.8	333.4	335.0	336.5	338.1	339.7	341.3	342.9	344.5	346.1	347.7	349.2
14	335.6	357.2	358.8	360.4	361.9	363.5	365.1	366.7	368.3	369.9	371.5	373.1	374.6
15	381.0	382.6	384.2	385.8	387.3	388.9	390.5	392.1	393.7	395.3	396.9	398.5	400.0
16	406.4	408.0	409.6	411.2	412.7	414.3	415.9	417.5	419.1	420.7	422.3	423.9	425.4
17	431.8	433.4	435.0	436.6	438.1	439.7	441.3	442.9	444.5	446.1	447.7	449.3	450.8
18	457.2	458.8	460.4	462.0	463.5	465.1	466.7	468.3	469.9	471.5	473.1	474.7	476.2
19	482.6	484.2	485.8	487.4	488.9	490.5	492.1	493.7	495.3	496.9	498.5	500.1	501.6
20	508.0	509.6	511.2	512.8	514.3	515.9	517.5	519.1	520.7	522.3	523.9	525.5	527.0
21	533.4	535.0	536.6	538.2	539.7	541.3	542.9	544.5	546.1	547.7	549.3	550.9	552.4
22	558.8	560.4	562.0	563.6	565.1	566.7	568.3	569.9	571.5	573.1	574.7	576.3	577.8
23	584.2	585.8	587.4	589.0	590.5	592.1	593.7	595.3	596.3	598.5	600.1	601.7	603.2

39.37 Inches = 1 Meter = 10 Decimeters = 100 Centimeters = 1,000 Millimeters.

24 Inches = 0.6096 Meters.

1 Yard = 0.9143 Meters.

1 Mile = 1,609.3 Meters.

METRIC CONVERSION TABLE

Millimetres x .03937 = inches.
 Millimetres ÷ 25.4 = inches.
 Centimetres x .3937 = inches.
 Centimetres ÷ 2.54 = inches.
 Metres x 39.37 = inches.
 Metres x 3.281 = feet.
 Metres x 1.094 = yards.
 Kilometres x .621 = miles.
 Kilometres ÷ 1.6093 = miles.
 Kilometres x 3280.833 = feet.
 Square millimetres x .00155 = square inches.
 Square millimetres ÷ 645.2 = square inches.
 Square centimetres x .155 = square inches.
 Square centimetres ÷ 6.452 = square inches.
 Square metres x 10.764 = square feet.
 Square kilometres x 247.1 = acres.
 Hectare x 2.471 = acres.
 Cubic centimetres ÷ 16.387 = cubic inches.
 Cubic centimetres ÷ 3.69 = fluid drams.
 Cubic centimetres ÷ 29.57 = fluid ounces.
 Cubic metres x 35.315 = cubic feet.
 Cubic metres x 1.308 = cubic yards.
 Cubic metres x 264.2 = gallons (231. cubic inches).
 Litres x 61.023 = cubic inches.
 Litres x 33.84 = fluid ounces.
 Litres x .2642 = gallons (231. cubic inches).
 Litres ÷ 3.785 = gallons (231. cubic inches).
 Litres ÷ 28.317 = cubic feet.
 Hectolitres x 3.531 = cubic feet.
 Hectolitres x 2.84 = bushels (2150.42 cubic inches).

Hectolitres x .131 = cubic yards.
 Hectolitres x 26.42 = gallons (231. cubic inches).
 Grammes x 15.432 = grains.
 Grammes x 981. = dynes.
 Grammes (water) ÷ 29.57 = fluid ounces.
 Grammes ÷ 28.35 = ounces avoirdupois.
 Grammes per cubic centimetre ÷ 27.7 = pounds per cubic inch.
 Joule x .7373 = foot pounds.
 Kilogrammes x 2.2046 = pounds.
 Kilogrammes x 35.3 = ounces avoirdupois.
 Kilogrammes ÷ 907.2 = tons (2,000 pounds).
 Kilogrammes per square centimetre x 14.223 = pounds per square inch.
 Kilogram-metres x 7.223 = foot pounds.
 Kilogrammes per metre x .672 = pounds per foot.
 Kilogrammes per cubic metre x .062 = pounds per cubic foot.
 Kilogrammes per cheval x 2.235 = pounds per horse-power.
 Kilowatts x 1.34 = horse-power.
 Watts ÷ 746. = horse-power.
 Watts x .7373 = foot pounds per second.
 Calorie x 3.968 = B.T.U.
 Cheval vapeur x .9863 = horse-power.
 (Centigrade x 1.8) + 32 = degrees Fahrenheit.
 Franc x .193 = dollars.
 Gravity Paris = 980.87 centimetres per second.
 Tonneau x 1.1023 = tons (2,000 pounds).

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